

CYCLE GUIDE

CC 02763

1985 TESTS:

\$1.75
JANUARY 1985

Suzuki GS700E, Honda VF700S
Sabre, EML Sport Sidecar

**WE RIDE THE IRONBUTT
MARATHON ROADRACE:**

8400 gruelling miles on a Softail

160-MPH

WIND TUNNEL TEST

AERODYNAMICS: NEW PATH TO HIGH PERFORMANCE

**STREAMLINING
MYTHS
SHATTERED**



DIR 1015
ALMRL449DOU14 01 CG MAY86
LARRY LAWRENCE
449 DOUGLAS DR
BROWNSBURG
IN 46112

DEAL OF THE CENTURY

"British Pound Hits All-Time Low Against U.S. Dollar"

Los Angeles Times, October 12, 1984



The TMX 2000 has been referred to as "the most exciting and innovative British helmet to come along in 20 years."

Incredible promotion offers world famous British CENTURION helmets for only \$79.00

ONLY 6,000 HELMETS AVAILABLE

The British manufacturer of the world famous CENTURION helmet is interested in expanding their market for the new and revolutionary TMX 2000 full-face motorcycle helmet. In the first of several moves to capture a significant portion of the world market, the TMX 2000 helmet is being introduced in the U.S. at an unbelievably low price to stimulate public interest in high-quality products at affordable prices.

The TMX 2000 helmet exceeds all U.S. and International government standards, including D.O.T. and is A.M.A. approved.

The TMX 2000 helmet is the latest in high-tech design from CENTURION helmets who have more than 20 years experience in helmet manufacture. CENTURION is a member of the Safety Helmet Council of America and every TMX 2000 carries an SHCA label and serial number.

NORMALLY RETAILS FOR \$119

The TMX 2000 retails for the equivalent of \$119.00 throughout the European Economic Community (E.E.C.) and the rest of the freeworld. It has been featured in similar international publications to Das Motorrad and Bike.

TMX 2000 FEATURES



The TMX 2000 is the first production helmet to utilize an exclusive AIR DAM design which significantly reduces wind noise. The AIR DAMS' aerodynamic design in turn reduces wind turbulence which reduces rider fatigue.

Made of a pliable rubber material the AIR DAM can be removed from the helmet if desired.

Another TMX 2000 feature is a 3-way ventilation system. One position allows direct air flow to the face, second position closes ventilation and third position directs air flow up along the face shield.

Other features include a clear lexan polycarbonate face shield which sets in to three different open positions and locks in the closed position until released by the press of a button. The TMX

2000 also has genuine grade "A" leather and brushed nylon interior.

The TMX 2000 has a full one-year warranty against defective materials and workmanship.

FREE SHIELD AND HELMET BAG

A \$9.50 value replacement Lexan polycarbonate shield will be given FREE with the first 500 orders. Specify clear or gradient shield.

Also a very stylish storage bag is offered FREE with each helmet sold during this promotion.

Order Now!

There is a limit of two (2) helmets per address at this promotional price, but if orders are received before midnight December 24, 1984, a maximum of five (5) may be ordered per address.

To receive your world famous CENTURION TMX 2000 helmet, tear off the corner of this promotional offer and enclose it with your name, address, telephone number, and \$79.00 ea. plus only \$5.00 for shipping and handling regardless of how many helmets you order.

Colors: Jet Black
Toma Red Dove Grey
Appliance White

HEAD SIZE	NO.	HELMET SIZE
21 1/4" TO 21 3/8"	1	6 3/4 - 6 7/8 XSM.
22" TO 22 1/2"	2	7 - 7 1/8 SM.
22 3/4" TO 23 1/4"	3	7 1/4 - 7 3/8 MED.
23 1/2" TO 24 1/8"	4	7 1/2 - 7 5/8 LG.
24 3/8" TO 24 3/4"	5	7 3/4 - 7 7/8 XLG.

Method of payment: Visa, Mastercard, American Express, personal check, money order.

Allow four weeks on orders paid by personal check. Do not send cash. No C.O.D.'S please.

CENTURION LTD.

18146 Sherman Way Bldg. 5 #22
Reseda, CA. 91335

1-(800) 524-6746 Inside California
1-(800) 852-0800 Outside California
Including Alaska & Hawaii

This offer is good until
midnight, February 28, 1985.

Contents

VOL. 19 NO. 1

January 1985

THE NEW FRONTIER

- 18 WIND TUNNEL *what you can't see won't hurt you, but it will slow you down*—by David Dewhurst
- 21 TUNNEL VISIONS *windows on the wind*—by Jim Miller
- 23 AERODYNAMICS LEXICON *the tunnel of babble*—by Don Fuller
- 24 AERODYNAMICS: BLASTS FROM THE PAST *a history of wind-breakers*—by Charles Everitt
- 26 THE WINNER IS *the tyranny of numbers*—by Don Fuller

TESTS

- 37 EML SIDECAR *more than training wheels*—by Jim Miller
- 57 SUZUKI GS700E 1983 *revisited*—by Paul Van Zuylen
- 51 HONDA VF700S SABRE *tariff-buster for sport-touring*—by Charles Everitt

FEATURES

- 35 INTERVIEW: JEAN-PIERRE BAILBY *the head of BMW North America speaks his mind*—by Michael Jordan
- 42 IRONBUTT *a blurred's-eye view of America*—by David Mallet
- 58 HONDA XR250R *On the trail of reliability*—by T. J. Rafferty

PRODUCT EVALUATIONS

- 48 BMW MULTIVARIO TANKBAG *bottomless Bavarian*—by Steve Thompson
- 50 WOLF PACK *leader of the back*—by Paul Van Zuylen
- 60 HONDALINE RAINSUIT *duckwear*—by T. J. Rafferty

GUIDE LINES

- 29 COMING SOON 1985 *Yamahas, from V to Z*
- 34 RUMORS *Interceptor Mk. II*

SPORT LINES

- 62 WINNERS AND LOSERS *1984's heros and has-beens*
- 67 PIT BITS *from behind the banners*

COLUMNS & DEPTS

- 6 CYCLE GUIDE'S CYCLE GUIDE *the numbers racket*
- 10 CONTACT POINTS *shortchanged by the double nickel*
- 14 THOMPSON AT LARGE *the ERA of two wheels*
- 16 MOTOMART *where money goes fast*
- 17 WISHBOOK *ask the genie*
- 74 LETTERS *write on*

QUOTE:

"In this crowd, the laid-back Softail and I look like bunny rabbits in a pack of coyotes. What am I doing here?" —Pg. 22

ON THE COVER:

Sitting in for our dummy, Zeph, is Jim Miller, inside the Graduate Aeronautical Laboratory at the California Institute of Technology. David Dewhurst recorded the image just before the wind hit the fan.

Copyright 1985 Cycle Guide Publications Inc. Reproduction in whole or part is expressly forbidden without prior written permission of the publisher.

**CYCLE
GUIDE**

Publisher

Peter S. Nicolaysen

Editor

Larry Works

Art Director

Gilbert Luna

Executive Editor

Charles Everitt

Managing Editor

Jim Miller

Features Editor

David Mallet

Associate Editor

Paul Van Zuylen

Graphic Director

David Clark

Editorial Assistant

Mike Gillies

Sport Editor

Dain Gingerelli

News Editor

Joe Kress

Technical Advisor

David Dewhurst

Washington Desk

Steven L. Thompson

Foreign Correspondent

L.J.K. Setright

Contributors

Patrick Behar, Paul Buckley,
Rich Chenet, Chris Eastman,
Torrey Heeb, Vic Huber,
Doug Jackson, Vince McMahon,
T.J. Rafferty, Tom Riles,
Joe Saputo, Mark Wagner,
George Wegner



TAKING IT TO THE LIMIT.

INTRODUCING THE NINJA 600R.

YOU'LL RIDE IT OUT OF YOUR MIND.



Because you'll swear it responds to your mind.

You see the curve ahead... the line you want. It seems you just look, and the Ninja 600R takes it.

Effortlessly. Immediately.

The Ninja doesn't have to be told twice. And it doesn't argue. It is simply one with you.

This is a machine so neutral in handling, so light in weight, so rigid in frame that cornering is as easy as thinking.

No muscle. No weight shift. No steering correction. Because this bike thinks as fast as you do.

On the road of your dreams Ninja is the ride of your dreams. An exquisite, razor-

sharp balance of horses and handling.

The baby Ninja crams 750cc power into a 600cc engine. And 500cc GP handling into a 600cc chassis.

It finesses the esses with more precision and less effort than you ever imagined. Yet it will stick with 750's and taunt the biggest bikes on the pike.



Ninja represents the emergence of mind over muscle... though the muscle is considerable—an all-new, liquid-cooled, 16-valve, DOHC, In-Line Four.

It's brains over brawn. A double triangulated perimeter frame resists the forces that would twist and flex conventional frames.

Smart.

And it's finesse over force. Ultra-wide 16-inch wheels and tires sharpen steering response. Bumps and potholes are inhaled through anti-dive forks in front, adjustable damping Uni-Trak® in back.

And the aerodynamic fairing splits the air cleanly with minimum drag. Even the headlight is flush.

The Ninja 600R is a mind-altering experience. A machine for the few, the proud, the truly possessed.

Let it show you what it can do. You'd be crazy not to.

Kawasaki
TAKING IT TO THE LIMIT

Call 1-800-447-4700 for the Motorcycle Safety Foundation beginner or expert course near you.

CYCLE GUIDE'S CYCLE GUIDE

Cycle Guide's catalog of recent test hardware—no brag, just fact

OFF-ROAD

MAKE & MODEL	ISSUE	TYPE	ENGINE TYPE	WHEEL TRAVEL, IN. FRONT/REAR	WEIGHT, LBS.	RAKE/TRAIL, DEGREES/INCHES	GEARS
Cagiva WRX 250-'84	August '84	Enduro	Two-stroke	11.1/11.6	232	30.0/4.65	6
Cagiva WMX 250-'84	January '84	Motocross	Two-stroke	11.9/12.7	221	28.0/4.65	6
Can-Am 320 Trials-'84	October '84	Trials	Two-stroke	4.8/4.5	205	25.5/3.00	6
Can-Am Sonic MX-'83	January '83	Motocross	Four-stroke	11.6/12.1	272	28.0/4.24	5
Honda ATC250R-'84	May '84	ATV	Two-stroke	8.8/8.0	311	N/A	5
Honda CR125R-'84	April '84	Motocross	Two-stroke	11.2/12.3	195	27.2/4.29	6
Honda CR250R-'84	February '84	Motocross	Two-stroke	11.7/12.2	216	26.7/4.13	5
Honda CR500R-'84	June '84	Motocross	Two-stroke	12.0/12.5	228	27.2/4.25	5
Honda XR200R-'84	August '84	Enduro	Four-stroke	9.9/9.6	235	26.0/4.13	6
Honda XR350R-'83	June '83	Enduro	Four-stroke	10.9/10.4	253	26.0/3.94	6
Honda XR500R-'83	October '83	Desert	Four-stroke	11.0/12.2	278	25.5/3.94	5
Husqvarna 250CR-'83	January '83	Motocross	Two-stroke	11.8/12.7	227	30.0/5.51	6
Husqvarna 400WR-'84	July '84	Enduro	Two-stroke	11.0/11.2	242	28.5/5.16	6
Husqvarna 500CR-'83	May '83	Motocross	Two-stroke	11.8/12.8	240	30.0/5.51	4
Husqvarna 500XC-'83	October '83	Desert	Two-stroke	11.7/12.8	245	30.0/5.98	6
Kawasaki KXT250 Tecate-'84	May '84	ATV	Two-stroke	8.6/8.2	319	N/A	5
Kawasaki KDX200-'84	August '84	Enduro	Two-stroke	10.0/10.9	214	28.0/4.76	6
Kawasaki KDX250-'83	November '83	Enduro	Two-stroke	10.1/10.7	232	29.0/5.00	6
Kawasaki KX125-'84	April '84	Motocross	Two-stroke	11.7/12.2	195	27.5/4.57	6
Kawasaki KX250-'84	February '84	Motocross	Two-stroke	11.6/12.3	220	28.5/4.65	5
Kawasaki KX500-'83	May '83	Motocross	Two-stroke	11.7/11.9	232	29.0/4.80	5
Kawasaki KLR600-'84	September '84	Dual-purpose	Four-stroke	9.2/8.3	322	29.5/4.80	5
KTM MC 495-'83	May '83	Motocross	Two-stroke	11.9/12.4	249	28.0/4.21	4
Maico 490 Spider-'83	May '83	Motocross	Two-stroke	11.8/12.2	240	27.0/4.72	4
M-Star 250 Supercross-'84	Nov./Dec. '84	Motocross	Two-stroke	11.7/12.7	230	27.0/4.72	5
Suzuki ALT50-'83	June '83	ATV	Two-stroke	N/A	90	N/A	1
Suzuki Quadrunner 250-'84	October '84	ATV	Four-stroke	1.0/N/A	384	N/A	5
Suzuki RM125-'84	April '84	Motocross	Two-stroke	11.5/12.4	190	29.5/4.84	6
Suzuki RM250-'84	February '84	Motocross	Two-stroke	11.8/12.9	220	27.8/4.41	5
Suzuki RM500-'83	May '83	Motocross	Two-stroke	11.9/12.8	234	29.7/4.84	4
Yamaha IT200-'84	August '84	Enduro	Two-stroke	10.0/10.6	211	28.0/4.53	6
Yamaha XT250-'84	Nov./Dec. '84	Dual-purpose	Four-stroke	9.7/7.9	266	28.3/4.60	6
Yamaha YZ125-'84	April '84	Motocross	Two-stroke	11.9/12.3	194	27.7/4.57	6
Yamaha YZ250-'84	February '84	Motocross	Two-stroke	11.3/12.6	214	28.0/4.69	5
Yamaha YZ490-'84	June '84	Motocross	Two-stroke	11.3/12.7	227	28.5/4.72	4

STREET

MAKE & MODEL	ISSUE	ENGINE TYPE*	DISPLACEMENT, CC	QUARTER-MILE, SEC./MPH	TOP SPEED, MPH	WEIGHT, LBS.	FUEL CONSUMPTION, MPG	STOPPING DISTANCE FROM 60 MPH, FT.
BMW R100RS-'84	October '84	2C/G	979.9	13.425/95.84	111	506	45-57	163
BMW K100RS-'84	October '84	4I/G	987.2	12.381/109.48	133	532	39-54	139
H-D FXRS Low Glide-'84	January '84	45 deg. 2D/F	1337.7	13.917/94.57	112	575	38-48	140
H-D FXRT Sport Glide-'85	October '84	45 deg. 2D/F	1337.7	14.180/90.36	92	640	28-51	126
H-D FLTC Tour Glide-'84	March '84	45 deg. 2D/F	1337.7	14.603/88.75	107	774	39-54	152
H-D XLS Roadster-'83	April '83	45 deg. 2D/F	997.6	13.842/93.94	106	515	43-55	138
H-D XLX-61-'83	June '83	45 deg. 2D/F	997.6	13.459/95.94	106	488	40-72	128
Honda GL1200A Aspencade-'84	March '84	4C/G	1181.9	13.156/98.14	118	744	33-46	141
Honda Nighthawk 650-'83	December '82	4A/G	656.0	12.287/108.04	122	451	29-51	127
Honda Nighthawk S-'84	February '84	4A/G	696.7	12.048/109.75	125	492	28-45	125
Honda VF400F-'83	September '83	90 deg. 4D/F	399.1	13.588/96.35	112	402	34-51	127
Honda VF500F Interceptor-'84	July '84	90 deg. 4D/F	497.6	12.484/106.00	126	419	33-48	123
Honda VF700F Interceptor-'84	October '84	90 deg. 4D/F	698.9	12.323/106.50	124	512	37-48	136
Honda VF750F Interceptor-'84	May '84	90 deg. 4D/F	748.1	11.890/114.64	140	511	23-39	127
Honda VF1000F Interceptor-'84	May '84	90 deg. 4D/F	998.4	11.121/123.45	150	536	23-45	125
Honda VF700S Sabre-'85	January '85	90 deg. 4D/G	698.9	12.358/109.09	121	514	28-48	136
Honda VT500 Ascot-'83	October '83	52 deg. 2D/G	490.9	13.628/93.75	112	411	41-61	129
Honda VT750C Shadow-'83	April '83	45 deg. 2D/G	749.6	12.906/100.78	127	484	48-55	132
Kawasaki GPz550-'84	July '84	4A/F	553.8	12.559/105.38	123	436	32-59	136
Kawasaki GPz750-'84	May '84	4A/F	739.0	12.114/110.97	135	502	37-47	120
Kawasaki GPz750 Turbo-'83	July '83	4A/F	739.0	11.225/123.53	146	514	N/A	N/A
Kawasaki GPz1100-'84	May '84	4A/F	1089.9	11.312/120.80	145	560	24-48	120
Kawasaki KZ700-'84	August '84	4A/F	694.9	12.422/107.01	127	483	39-53	133
Kawasaki Ninja-'84	May '84	4A/F	908.2	11.181/123.62	146	523	24-44	126
Kawasaki Voyager-'84	March '84	6A/G	1286.1	13.346/97.61	116	882	28-44	142
Laverda RGS 1000-'84	December '83	3A/F	980.8	12.565/106.50	130	556	25-40	140
Suzuki GS550ES-'84	July '84	4A/F	572.3	12.675/103.68	123	444	30-51	135
Suzuki GS700E-'85	January '85	4A/F	699.5	11.978/112.21	125	485	27-53	140
Suzuki GS1150ES-'84	October '84	4A/F	1135.4	11.268/122.44	148	542	26-51	122
Suzuki GV700GL Madura-'85	Nov./Dec. '84	82 deg. 4D/G	698.5	13.307/102.15	111	546	23-45	143
Yamaha RZ350-'84	July '84	2A/F††	347.4	13.529/97.61	111	357	26-53	122
Yamaha RZ500-'84	September '84	4D/F††	499.7	12.053/112.64	136	439	25-37	N/A
Yamaha FJ600-'84	July '84	4A/F	598.8	12.468/105.63	126	435	32-50	129
Yamaha FJ1100-'84	June '84	4A/F	1097.6	10.992/124.48	146	535	27-46	121
Yamaha 920 Virago-'83	April '83	75 deg. 2D/G	920.0	12.835/101.46	108	503	38-45	138
Yamaha Venture Royale-'84	March '84	70 deg. 4D/G	1197.6	12.759/101.46	124	752	37-53	137

*A-Transverse Vertical, B-Vertical (single-cylinder only), C-Horizontally Opposed, D-Tandem Vee, E-Transverse Vee, F-Chain Final Drive, G-Shaft Final Drive, H-Belt Final Drive, I-Horizontal Longitudinal

† indicates a calculated top speed; †† indicates a two-stroke engine

Order back issues through Cycle Guide Back Issues Department, 20916 Higgins Court, Torrance, California 90501. Include \$2.50 for each copy ordered.

CYCLE GUIDE

CYCLE
GUIDE
PUBLICATIONS

EXECUTIVE AND EDITORIAL OFFICES

Cycle Guide Publications
20916 Higgins Court
Torrance, California 90501

President
Executive Vice-President
Vice-President, Treasurer
Vice-President, Finance
Vice-President, Circulation
Subscription Manager

George W. Dougherty
Peter S. Nicolaysen
Irv Braun
Anthony Lisanti
L. Albert Crespo
Paul J. Zive

CYCLE GUIDE (USPS 535-210) is published monthly except during November by Cycle Guide Publications, Inc., 20916 Higgins Court, Torrance, California 90501. Second Class Postage paid at Torrance, California and at additional mailing offices.

EDITORIAL CONTRIBUTIONS are welcomed by Cycle Guide Publications, Inc., but cannot be considered unless guaranteed exclusive. Cycle Guide cannot be responsible for unsolicited material or damage to same in mails. If material is to be returned, include self-addressed, stamped envelope.

EASTERN SALES OFFICE

Joe Salluzzo
Eastern Sales Manager
770 Lexington Avenue
New York, New York 10021
Phone: (212) 486-8430

WESTERN SALES OFFICE

Charles Young
Advertising Manager
Marcel Fortney
Advertising Representative
20916 Higgins Court
Torrance, California 90501
Phone: (213) 328-5700

Advertising Production Manager
Advertising Assistant

Muriel Torri
Marion Douglas

NEWSSTAND SALES MANAGERS

Eastern Newsstand Sales
Western Newsstand Sales
Central Newsstand Sales

Ron Brennan
Sam Frode-Hansen
Jim Wanek

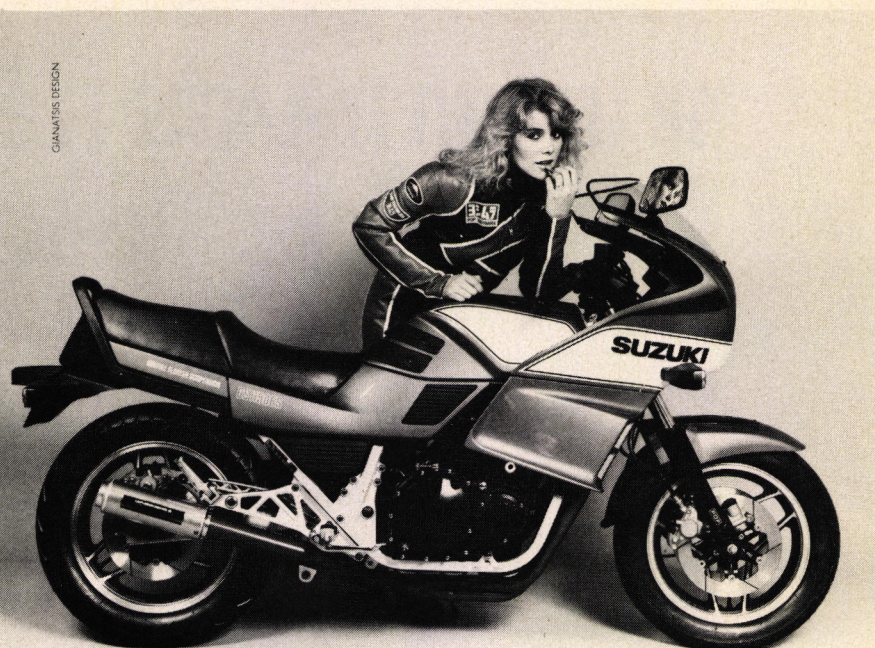
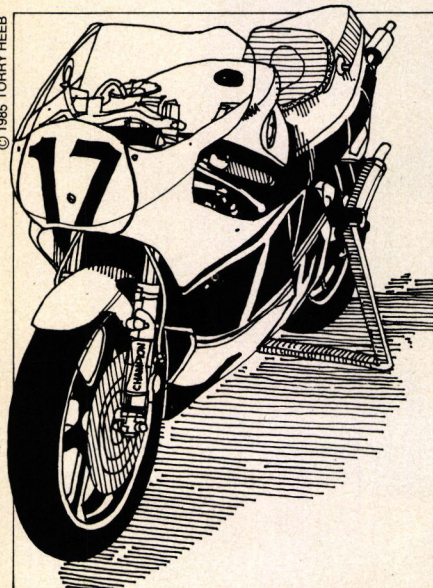
SUBSCRIPTION AND CIRCULATION

Cycle Guide Reader Service
P.O. Box 993
Farmingdale, New York 11737-0001
1-800-645-9559 National
1-800-732-9119 New York

Please include a copy of the mailing label from a recent issue when corresponding about your subscription. Postmaster: Send forms 3579 to the above address.

SUBSCRIPTION RATES: United States, \$13.98 one year, \$24.00 two years, \$32.00 three years. In Canada, add \$5.00 per year, all other countries add \$8.00 per year. Single copy rate \$1.75.

MEMBER OF AUDIT BUREAU OF CIRCULATIONS



Yoshimura PRO-Series Exhaust Systems

The hand-crafted construction of our new PRO-Series Exhaust Systems with their trend-setting aluminum canisters were developed and proven on our Championship-winning AMA Superbikes. Available to fit most models of Honda, Kawasaki, Suzuki and Yamaha, PRO-Series Exhausts are available in three different versions.

Series VII

Yoshimura's PRO-Series VII RoadRace Exhaust System is designed without compromise to provide maximum cornering clearance on the street or track. Removal of the bike's centerstand is required for installation. Large diameter primary tubes of equal length are dyno tuned to work best on mildly modified to full race motors. Supplied with Medium Street Baffle. \$230.

Complete RoadRace Systems for Honda VF500, 750 and 1000 Interceptors. \$279.



Series VIII

Our PRO-Series VIII SuperStreet Exhaust System is designed for the performance-minded street rider who wants light weight and improved cornering clearance over his stock exhaust system, along with the good looks of our competition-bred aluminum canister silencer. The bike's centerstand is retained with access to the oil filter and oil drain plug. Primary tube diameter is tuned to work best over a wide powerband with stock or mildly-modified motors. Supplied with Medium Street Baffle. \$230.

Slip-Ons

Want the good looks and performance of a racing style exhaust without the added expense of a complete header system? Our new PRO-Series Slip-On Silencers are an easy replacement for stock mufflers while reducing weight and uncorking power! Your stock header section is retained to allow use of the centerstand and access to the oil filter and oil drain plug. \$149/pr.

When you're ready to build your engine for even more power a set of Yoshimura tuned Mikuni Smooth-bore or new style Keihin CR carbs in a full range of sizes are available for all applications.

We also offer a complete line of Stage I camshafts for street use and Stage II camshafts with heavy-duty springs for the track, together with Yoshimura big-bore piston kits.

ORDER TOLL FREE!
(800) 634-9166
In CA (714) 628-4722

YOSHIMURA
The Precision. The Performance.
The Power.

Yoshimura Research and Development of America, 4555 Carter Court, Chino, CA 91710. Visa and MasterCard. Send \$4 for latest catalog. T-shirts \$7.50 (+\$1.50 shipping, CA add tax) in Red or White, S, M, L, XL.

FREE! '85 FOX CATALOG

The awesome '85 FOX CATALOG is available FREE!
Send just \$1 to cover postage & handling and you'll receive our 64 page color-drenched catalog filled with the best values in motorcycling. Enclosed please find \$1.00 to cover postage and handling, please rush my copy of the '85 FOX CATALOG.

Name: _____ CG

Address: _____

City: _____ State: _____ Zip: _____

Send to: FOX, 520 McGLINCY LANE, CAMPBELL, CA 95008 USA

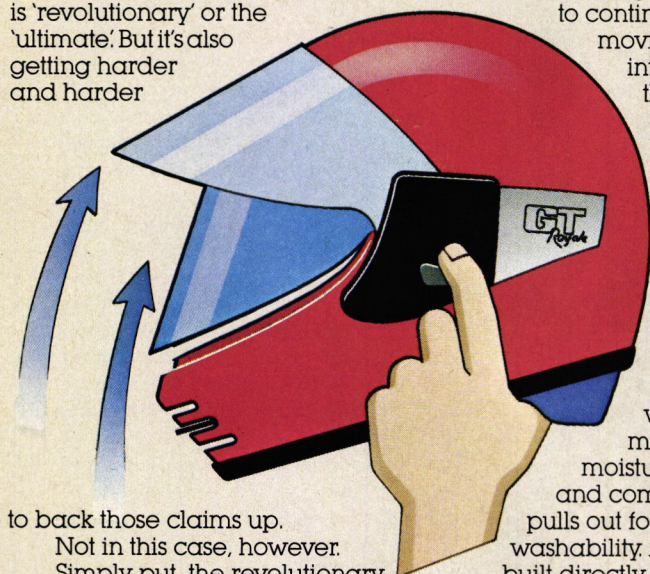
THE ULTIMATE HEAD TRIP.



This and other Bell products available consumer direct. For pricing and ordering information, please write to Bell Helmets, Inc., 15301 Shoemaker Avenue, Norwalk, California 90650. \$10 shipping charge additional.

AND HOW BELL MAKES IT HAPPEN.

It's getting easier and easier these days to claim something new is 'revolutionary' or the 'ultimate'. But it's also getting harder and harder



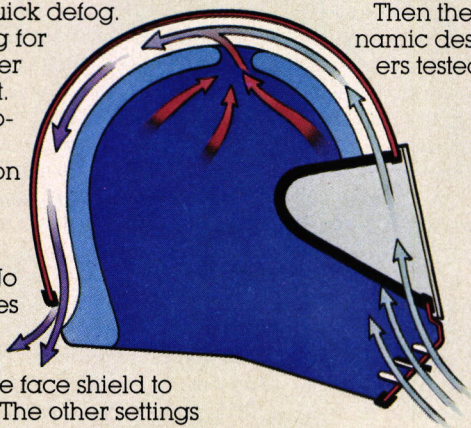
to back those claims up.

Not in this case, however.

Simply put, the revolutionary features and construction of the Bell GT Royale make it the most advanced street helmet in the world.

For openers, consider how the Lexan scratch-resistant face shield opens. Automatically. Stopped at a traffic light, you can touch a single button and the shield automatically lifts into one of two positions. A slight opening for a quick defog. Or a full opening for more air. No other helmet does that.

Equally revolutionary is Bell's unique ventilation system which gives the rider four *different* intake settings. No other helmet does that. The first setting directs cooling air to the face shield to reduce fogging. The other settings allow you to adjust the amount of air that flows through ventilation canals



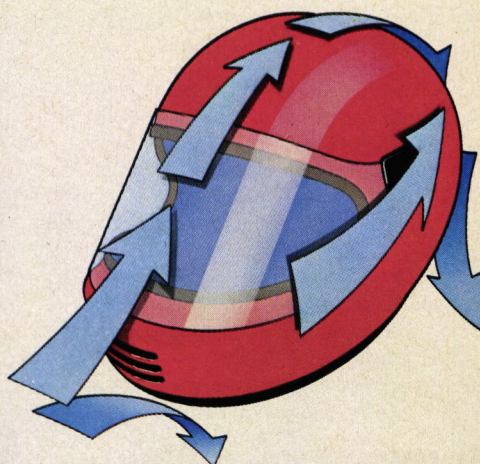
built *right into the helmet shell*.

Bell even designed a venturi effect to continually keep fresh air moving through the interior. So even on the warmest days it helps the lining stay dry.

And Bell knows the only thing worse than a wet liner is a dirty liner. Which is why they added another first on a touring helmet. They put in a polypropylene washable liner. It makes it easier for moisture to evaporate

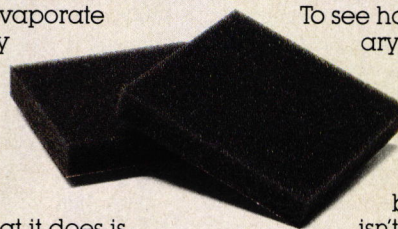
and completely pulls out for easy washability. And built directly into the lining is another revolutionary feature. Bell's new Adjustable Cheek Pad System. What it does is allow each rider to create his own fit by inserting pads into pockets built into the GT Royale's lining. (A complete assortment of pads comes with each helmet.)

Then there's the aerodynamic design. Bell researchers tested and retested



different structural variations in a wind tunnel. What they came up with is a helmet that easily met Snell 85. And a helmet design that makes the GT Royale actually feel lighter and more comfortable.

To see how truly revolutionary the GT Royale is, see it for yourself at a nearby dealer. Bell's confident your money can't buy a better helmet. And isn't owning the very best really the ultimate head trip?



THIRTY YEARS AT THE TOP



Contact Points

Deep Six The Double Nickel

Traveling faster today than you were four years ago?

• The Anti-55-mph Campaign finally is gaining strength. Surely, when a group as radical as the American Motorcyclist Association proclaims its opposition, the tide has turned. And yet. . .

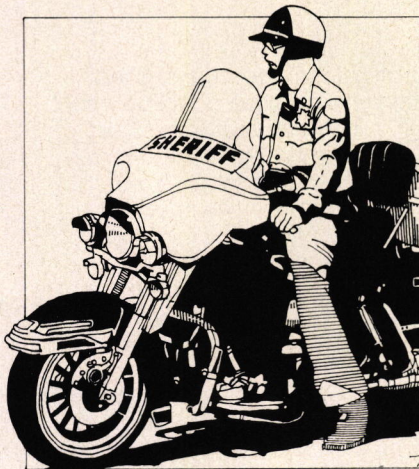
The election is still weeks away as this is written, but there's little reason to think the incumbent president won't still be recumbent in the White House as you read this. Sidestepping problems like acid rain, trade deficits, nuclear arms control and toxic waste would fatigue even a young man. Not to mention the long line of applicants for subsidy programs. Revoking the national 55-mph law simply hasn't become a presidential priority, despite Ronald Reagan's 1980 promise to do so.

No, the groundswell of public opinion will have to rise considerably before he jumps back on the bandwagon. And when it does, he will. In the meantime, the campaign will focus on the U.S. Congress, which has authority to repeal the law. The statute, enacted in 1974 during the "oil crisis," somehow etched itself into the granite of federal proclamation, inert and unyielding. The cadre of apologists sustaining the national limit cites the combination of fuel savings and traffic safety as the rationale.

But there is no fuel shortage now, if indeed there ever really was, and most newer vehicles get increasingly improved mileage. And the savings attributed to slow travel would likely triple if motorists paid regular attention to tire pressures and engine tuneups. Safety? Let the word go forth from this time and place: Nothing is safe. (Well, nothing that's any fun.) The safety quotient of the federal limit is roughly equal to the percentage your vehicle insurance has dropped since the law took effect.

What, then, is the real issue in this dispute? If Safety and Conservation are just smoke screens, which I strongly suggest they are, what are the more fundamental questions behind the clouds? Seems to me there are only two: Jurisdiction and Money.

The federal government has presumed, without public mandate, to dictate a common speed law for all states. And to compel adherence, it has threatened to withhold highway construction funds from those states that don't enforce the law. It's easy enough for some folks to put all this in the No Big Deal



category. Traffic cops in many areas have adopted the "benign enforcement" policy, issuing tickets only for flagrant violations. Nevada imposes a \$5.00 wrist slap for speeds below 70, and Utah issues a minimal fine under 64 mph. Plus, bills are pending in several state legislatures that would re-establish their right to set speed limits, thereby testing the teeth in the federal statute.

But the piecemeal approach brings only confusion to an already confounding mess. It invites corruption throughout the framework of law enforcement, and also victimizes motorists unaware of what speeds the unwritten codes permit for a given area. And motorcyclists suffer an added disadvantage. Most experienced riders travel at a pace slightly faster than the flow of traffic. Given our far greater vulnerability, we know better than to linger in the passing lane beside an 18-wheeler, or to get boxed in between cars. The best defense is a good offense. So, in a traffic mix where the aggregate rate is 62 mph (about average in my area), and the rider keeps clear at 65, the result is predictable. Busted.

It isn't fair. Let alone necessary.

I confess, in front of Ron and everyone, that I've been a scofflaw since the 55 law was instituted 10 years ago. In that time, I've been involved in no freeway mishap, nor caused any damage to the person or property of another traveler thereupon. But my personal tally shows that this impudence has cost me a total of \$346.00. I figure that's hardly exorbitant: 35 bucks a year for the freedom of avoiding inept drivers, enjoying the open road and getting to the races on

time. Plus, I have the consolation of knowing my money has gone for radar equipment, prosecution paperwork, computers, cadet training and surveillance aircraft. Certainly my donations haven't been frittered away on highway improvements, driver education or motorcycle awareness programs.

However, all good things must end, and the time to scrap the national speed limit is long overdue. Not only because the enormous costs outweigh the dubious benefits, but because it's a dangerous precedent for federal intervention in state affairs. To expect a nation, so diverse in geography and population, to uphold a rule that effectively creates criminals out of otherwise law-abiding citizens, is to whistle a looney tune. Federal extortion won't cut it. The center will not hold.

What to do next? You can help accelerate the demise of the double nickel with a letter to your congressman. Also send a duplicate to the House Public Works and Transportation Committee in Washington, D.C. How long will it take the legislature to get up to speed? Don't even ask.

Of course, we could borrow the feds' own tactic and use blackmail. About 100 years ago, some Irish peasants decided to put the squeeze on an unscrupulous British land agent by the name of Captain Charles Boycott. His family name survives to this day as a succinct term meaning: "We ain't buying it."

The current federal tax on gasoline is 15 cents per gallon. Consider, if you will, this intriguing scenario: Income tax time rolls around, and everyone, including the trucking companies, files an amended statement. Say, for example, that during the year you purchased a total of 1000 gallons of gasoline. Multiplied by 0.15, that comes to \$150 in federal tax, which you've already paid at the gas station. Just imagine the consternation it would cause in Washington if your tax statement included a brief note that read more or less as follows:

Dear IRS:

Please note that I have deducted \$150 from my tax payment this year. The money is being held in escrow pending repeal of the national speed limit.

Yours truly,

—T.J. Rafferty

Now YOU Can Be A MOTORCYCLE MECHANIC

Experts show you what to do, how to do it...

guide you every step of the way to become a skilled motorcycle mechanic.



New Motorcycle Riders Year After Year

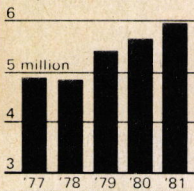


Work Out of Your Home
We show you how to start in spare time at home—or if you'd rather, get the knowledge you need to apply for a job working for someone else.

If you like to ride a bike for fun...learn how to fix it for profit! Can you imagine a better way to earn your living whether you choose to work in a cycle shop for somebody else or decide to start your own cycle repair business. Now, thanks to North American, there's a fast, easy way to get training at home in your spare time. No need to quit school or job. Experts show you step-by-step everything from minor tune-ups to major overhauls.

Registered motorcycles in the U.S.A. Source: Stat. Abs. of U.S.A. prepared by Bur. of Census.

Cycles are big business



Motorcycle registrations increased by more than one million in the five years from 1977 to 1981. There were nearly 6 million registered motorcycles in 1981—the latest year for which figures are available—and they all require maintenance.

SEND FOR FREE FACTS

Motorcycle Shops Employ Qualified Mechanics. Has your bike ever been out of action waiting for needed repairs? Some shops don't have enough mechanics to take care of everyone as fast as they like.

Graduation from this course does not insure that you will get a job. To find out how our graduates have done, send for our job placement record.



Wrenches, sockets, test instruments and more...
You Get Everything for a Fast Start!

Your Future is in Your Own Hands—You can decide for yourself whether you want to work for someone else or get into your own cycle repair business.

Start in your spare time repairing cycles at home—or get a job with a motorcycle shop! After you've been a working mechanic, you can decide whether you want to start your own repair business.

You'll Be the Center of Attraction in Your Circle of Friends—Enjoy the admiration of friends and neighbors as they flock around to watch you tear down and tune up all kinds of motorcycles. And just think of the satisfaction in knowing you've got the best performing bike in town. Plus, you can make extra dollars fixing motorcycles for friends, neighbors.

FIRST FOLD HERE

T11H

FIRST FOLD HERE

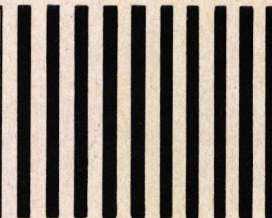
NO POSTAGE NECESSARY when you mail this ENTIRE Postage-Paid ad

To Mail—Fold ad in following manner:

1. Remove entire page—tear or cut on dotted line to left
2. Fold page in half on 1st fold lines
3. Fold page again, on 2nd fold lines
4. Tape or glue the 3 open sides and drop in the mail box today.

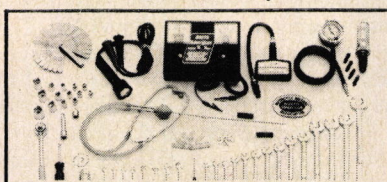
SECOND FOLD HERE

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



MAKE MONEY IN MOTORCYCLE REPAIR

SENT FREE
Rush FREE color brochure and full information on how I can learn Motorcycle Repair.



Special Cycle Tools and Test Instruments included to start you fast! We teach you how to use wrenches, sockets, impact screwdrivers, timing lights, compression gauges, vacuum gauges, degree wheels, wrench sets and much, much more. These are yours to use during your training...and yours to keep in your action packed career as a motorcycle mechanic.

Motorcycle Sales Mean Profits for Repairmen

Cycles are big business...and so is fixing them! There are nearly 6 million motorcycles registered in the U.S. today. Plus an estimated million more dirt bikes. No wonder there is work for the skilled repairman.

Name _____ Age _____

Address _____

City _____ State _____ Zip _____

NORTH AMERICAN SCHOOL OF MOTORCYCLE REPAIR
925 Oak Street, Dept. EMOC4, Scranton, PA 18508

SECOND FOLD HERE

BUSINESS REPLY MAIL

FIRST CLASS Permit No. 1000
Scranton, PA 18515

Postage will be paid by addressee

**NORTH AMERICAN SCHOOL
OF MOTORCYCLE REPAIR**

925 Oak Street
Scranton, PA 18508

REMOVE AND MAIL ENTIRE PAGE

Thompson at Large

Women on Bikes

Where are they?

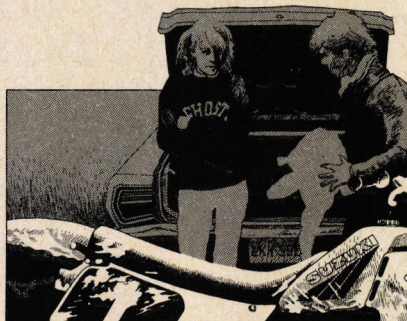
• Ever since the Middle Castrol Age, when men wore grease and bikes wore out, motorcycling has been the playground of the world's men. Sure, occasional notable females like Nancy Astor learned to ride occasional notable Brough Superiors, but the status quo established when hoop skirts hobbled females has continued, with only minor statistical fluctuations according to fad and fashion. A motorcycle was a man's machine. If women wanted to ride, well, they were welcome to try—but they could look for no special treatment, no outstretched hands. This was true in 1910, and it is true today.

The proof? Quite aside from definitive ownership statistics, it lies in a small ad that runs in almost every motorcycle magazine on sale in America. The ad is for a group calling itself "Women On Wheels." And it exists because the motorcycling body politic is overwhelmingly hostile to women.

Ordinarily, all this might be so much grist for feminist mills. Motorcycling males—from presidents of the companies that make bikes to the guys who ride them—might well be able to ignore the whole issue. But these are not ordinary times. These are times in which dealerships, warehouses and docks are crammed with unsold bikes. And so it might be well to examine the effects of nine decades of failure to sell motorcycles and motorcycling to women.

The first effect is that it has allowed everyone in the sales loop to concentrate on the wrong issues. A decade or so ago, the marketing buzz phrase was "the pie," a reference to the ubiquitous pie chart used to define market segmentation. The big argument then—and now—was between those who wanted to "expand the pie" and those who wanted to "carve a bigger slice." In other words, between the people who saw the big bucks at the end of a blitz to get new riders and those who figured you only got the big money by widening your market share. In these discussions, needless to say, neither the bigger-pie types nor the bigger-slice people considered women as target buyers.

Whether you've paid attention to all this or not, the battle between these camps within the marketing community has been fought out on television and in every other conceivable medium from



billboards to radio. In magazines like this one, they struggle to carve a bigger slice by talking enthusiast-talk to you, while in *Playboy* or on television they try to expand the pie by selling not just a marque, but motorcycling itself.

How successful has all this marketing strategy been? Go to a dealer and ask him. In the midst of the biggest explosion of new technology in motorcycle history, in the midst of the most awesome wave of bikes ever conceived, buyers are staying away in droves.

Now ponder this. At the same time motorcycle dealers are starving, boat dealers are opening Swiss bank accounts and sending their kids to weekends in Monte Carlo. Car dealers, only a few years ago desperate for any sales, now ask buyers to take a number and wait quietly in the showroom for the next available salesperson.

Why the disparity? It isn't the difference between a buyer's needs and wants: People don't need boats any more than they need bikes. The difference is that in the case of boats and cars, women are actively recruited as buyers, participants in the game. In motorcycling, nothing could be further from the case.

Motorcycling is not alone in this failure to sell to women. One other once-significant genre has failed as profoundly, with the same dismal results. The segment of American aviation known as "general" aviation has been in its worst slump in history, a slump that coincides with motorcycling's. And it, too, has been a historically male-dominated activity, so much so that female pilots long ago established their own version of *Women on Wheels*; they called it "The 99s."

Why so much noise about women? Because they now make up a powerful economic segment by themselves, rather than as part of a family. The editor of

American Demographics says that two-thirds of the women between the ages of 25 and 34 are working. That means they bring home their own paychecks, and therefore want to decide how to play with it—a not unreasonable request. Given this, given the growing independence of mind and body this provides, how many women of this group (which is, by the way, prime bike-buying age) are likely to be drawn in to play on motorcycles? Since not many are likely to enjoy the totally passive and even ritually subordinated role of a pillion passenger for long, and since our manufacturers are not actively selling to them, not many. The result: Their "play money" goes somewhere besides motorcycling—or aviation—and the dealerships get emptier and emptier.

There is nothing at all wrong with motorcycling being a male activity. Where, after all, is it written that women and men must always play one another's games? But if men wish it to remain so, and if the market indicators quoted are accurate, then men will have to learn to consider this a genre of profoundly reduced activity, since dollars generate energy, and when there are fewer dollars circulating, there is less energy. Coupled with the shrinking pool of young men available to be lured into riding, this might brake the flywheel of progress in design that is now spinning so fast, and we might find ourselves in another long, dry season.

I hope that doesn't happen. I hope the industry and the users of the industry's products (that's you and me) throw open the doors to the half of the population that's been excluded consciously or unconsciously for so long, and then enjoy the benefits the boat and car people are experiencing. This does not mean selling men's bikes to women; this means a whole new approach, beginning with the design of motorcycles and ending with their merchandising and use.

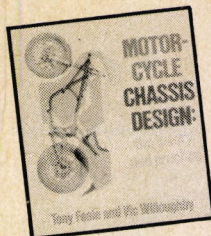
All of the motorcycles we can now buy are exclusively the visions of men. What would one designed for and by women look and ride like?

You might not care too much for the answer. Frankly, I might not, either. But we—and the huge untapped market that is America's working women—deserve the chance to find out.

—Steve Thompson

Motocourse, Honda, Harley & more

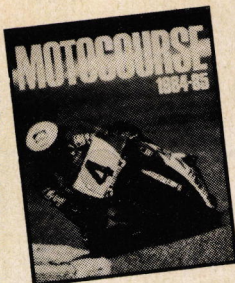
Classic Motorbooks



MOTORCYCLE CHASSIS DESIGN: THE THEORY AND PRACTICE

By Tony Foale & Vic Willoughby. Explains in depth what a motorcycle chassis needs to do, how it's best designed & constructed, from what materials, & how current production can be improved. Tells why many Italian bikes handle better than many Japanese ones & why one engine is easier to build a frame around than another. Covers rake, trail, steering head, square tube, leading link forks, mono-coques & spine frames. 160 pgs., 150 ill.

10620A \$14.95



MOTOCOURSE 1984-85

Edited by Peter Clifford. The 9th edition of Motocourse recalls the drama of the World Championship season in detailed race reports illustrated by Don Morley's sensational color action photographs. Includes full results, practice times, Circuit maps & complete machine specs. Color feature section includes the editor's assessment of the Top Ten riders, a review of technical developments, U.S. racing season, Isle of Man TT & transatlantic Trophy Races & more. Recognized throughout the world as the best motorcycle road racing annual. Order early — sold out last year. 192 pgs., 150 ill., 50 in color.

10635A \$36.95
Order Now! Books Shipped January 15, 1985

10492A Motocourse 1982-83. SALE \$17.95

SPECIAL OFFER — The Motocourse calendar can be yours for only \$5.00 if you order it together with your 1984-85 edition of Motocourse before January 1, 1985.

Order item number PM013A to take advantage of this offer.

MOTOCOURSE 1985 CALENDAR

Following last year's sell-out success, the 1985 Motocourse wall calendar features 13 new dramatic race shots from award-winning photographer Don Morley in a large, deluxe format. Spiral bound on top quality paper, this calendar represents amazing value.

ZZ44A \$11.95

OSPREY COLOR LIBRARY

The Osprey Color Library features books filled with beautiful, full-color photos printed on high quality, coated stock. Each page is filled with color photos highlighting the unique features of the bikes portrayed. The vivid color, reasonable price & high quality make these books excellent value for money. Recommended. 128 pgs., 120 photos.

10511A The Cult of the Harley-Davidson \$11.95

10644A Harley-Davidson: The Cult Lives On .. \$11.95

10643A Italian Motorcycles \$11.95

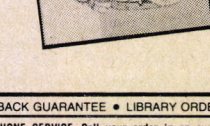
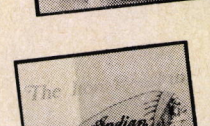
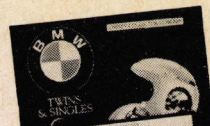
10572A Custom Motorcycles \$11.95

A TWIST OF THE WRIST: THE MOTORCYCLE ROAD RACER'S HANDBOOK

By Keith Code. Excellent book on high speed riding by the operator of the famous California Superbike School. Includes much information not available elsewhere.

... anyone who road races or is contemplating road racing, should read this book." Cycle News. 117 pgs., 73 ill.

10568B \$14.95



OSPREY COLLECTOR'S LIBRARY

Great selection of books on the World's great bikes. The books are researched by experts who use original Company records & over 150 photos to give you the most detailed look possible at the bikes. Complete specs & photos of each model plus history, year-by-year design & component changes. Final editing by noted writer Roy Bacon. Approx. 190 pgs., 150 ill.

10575B AJS & Matchless \$19.95

10571B Ariel: Postwar Models \$19.95

10512A BMW Twins & Singles \$19.95

10311B BSA Twins & Triples \$19.95

10628B Classic British Trials Bikes \$19.95

10647B Classic Motorcycle Racer Tests \$19.95

10628B Kawasaki: Sunrise to Z1 \$19.95

10375B Norton Twins \$19.95

10646B Suzuki Two-Strokes \$19.95

10636B Triumph Singles \$14.95

10347B Triumph Twins & Triples \$19.95

10397B Vincent Vee Twins \$19.95

THE ART & SCIENCE OF MOTORCYCLE ROAD RACING

Enthusiasts have long needed a comprehensive book of this kind. By the publishers of Motocourse, this fascinating book explores the reasons for racing success by looking at both rider & machine. Covers rules, engines, steering, suspension, frames, tires, circuits, practice, testing, race day, rivals, etc. Strongly recommended. 272 pgs., 100 ill.

10448A \$16.95

HONDA GOLD WING

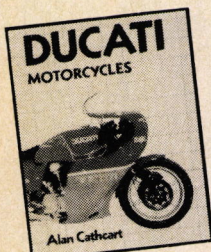
By Peter Rae. Designed in Japan with the American market in mind, the Gold Wing was so successful that it is now manufactured in the USA & imported back to Japan. This is the first history of a single model of a Japanese motorcycle, and it tells the fascinating story with previously secret archive material from Japan. 128 pgs., 100 b&w, 12 color ill.

10645A \$14.95

THE IRON REDSKIN

By Harry Sucher. This story of that most loved of American motorcycles, the Indian, brings back the memories of those first machines & follows their evolution. Captures the verve, style, artistic functions of design & handling abilities of the Indian. A year-to-year description tells of the good & bad times of the Indian factory at Springfield, Mass. 335 pgs., 220 ill.

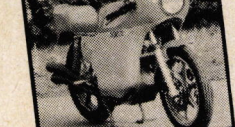
10151A \$22.95



DUCATI MOTORCYCLES

By Alan Cathcart. Started after the Second World War to provide small-engined bicycle power for the general populace. Ducati quickly made its name with a sporty machine nicknamed the "pup." Since then Ducati has produced some of the world's most successful road & racing machines. Alan Cathcart, an expert writer and road racer, did considerable research on this, the first book on the subject. 224 pgs., 200 b&w ill., 8 pgs. in color.

10573B \$29.95



THE HARLEY-DAVIDSON MOTOR COMPANY

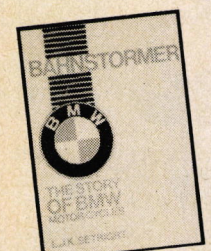
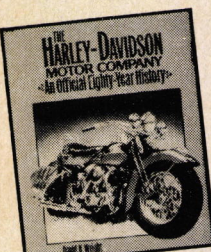
By David Wright. Definitive history of Harley. The Harley company allowed extensive research in their archives, so this fine book contains much authoritative information & hundreds of rarely seen photos. The entire production history is covered, with photos & detailed specs for each model. Plus racing, famous riders, Harley at war, Vintage Harley restoration, & the future of America's last Cycle maker. ABSOLUTELY NECESSARY for Harley buffs. 280 pgs., 250 ill., 14 in color.

19549A \$24.95

BAHNSTORMER: THE STORY OF BMW MOTORCYCLES

By L.J.K. Setright. Complete history of the motorcycle that started as an aircraft-engine builder's afterthought & became the universal symbol of excellence throughout the sport. Covers the many models from its inception in 1923 to the 1977 R100RS, the elite of today's superbikes. A fine book, relating the story of the bike that remains basically unchanged, but refined to an extent seldom seen in the world of transportation. 190 pgs., over 100 ill.

10034A \$18.95



24hr Toll Free 800-826-6600
ORDERS ONLY-WI, AK, HI, Canada & all inquiries use 715-294-3345

GENERAL INTEREST

10538 How to Tour Europe by Motorcycle 9.95

10038 Classic Motorcycles. 208 pgs., 290 ill. 16.95

10303 Great British Motorcycles of the '50s 14.95

RESTORATION

10009 Restoration of Vintage & Thoroughbred Motorcycles. 208 pgs., 282 ill. 15.95

10385 Do Yr. Own Mtrbike Spraying/Customizing. 12.95

10316 Restoring & Tuning Classic Motorcycles 18.50

TECHNICAL

10550 Performance Tuning in Theory & Practice Two Strokes. 113 ill. 15.95

10256 M/C Dynamics & Rider Control 22.00

10358 Two Stroke Tuning. 144 ill. 10.95

10389 Design & Tuning for Motocross 10.95

COMPETITION & RIDING

10516 Motorcycle Drag Racing. 300 ill. 10.95

10574 Superbiking: Manual for Fast Street Riding 9.95

60057 Daytona 1983 Superbike Race Video Tape VHS. 59.95

60056 Daytona 1983 Superbike Race Video Tape Beta. 59.95

INDIVIDUAL MAKES

10634 Ariel Square Four Super Profile 9.95

10586 BMW R69/R69S Super Profile 9.95

10543 Story of BMW Motorcycles 22.50

10398 BSA Gold Star & Other Singles 19.95

10332 Giants of Small Heath: BSA 17.95

10390 Harley-Davidson: Milwaukee Marvel 22.95

10407 Custom Chopper Cookbook. Custom Harleys 9.00

10349 What Fits What on Harley 1936-81 5.00

10595 Honda. Woollett. 160 pgs., 210 ill. 17.95

10346 Matchless: Once the Largest British Motorcycle Manufacturer. 208 pgs., 164 ill. 24.95

10580 Moto Guzzi: Genius & Sport 14.95

10553 MV Agusta Super Profile 9.95

10547 Norton Singles. 192 pgs., 165 ill. 19.95

10509 Royal Enfield: Postwar Models. 150 ill. 19.95

10536 Team Suzuki. 240 pgs., 250 ill. 29.95

10299 Bonnie: Triumph Bonneville 7.95

10633 Triumph Thunderbird Super Profile 9.95

10627 Yamaha. 283 pgs., 170 ill. 16.95

10 DAY MONEY-BACK GUARANTEE • LIBRARY ORDERS & DEALER INQUIRIES INVITED

24 HOUR TOLL FREE PHONE SERVICE. Call your order in on our toll free number, DIAL 1-800-826-6600. WI, AK, HI & Canada use 715-294-3345 Monday-Friday 8 AM - 4 PM (not toll free). Items can be charged to Master Card, Visa or American Express. \$2.95 handling fee, charged to all orders, covers cost of shipping 4th class bookpost or UPS only. We will ship best way. NO CODs.

Classic Motorbooks

P.O. Box 1/CG24
OSCEOLA, WISCONSIN 54020

Send item numbers: _____ PLEASE PRINT

Please include \$2.95 handling fee on all orders.
Enclosed is my check or money order for \$ _____

Charge to my: ☐ MC ☐ VISA ☐ AMEX ☐ CARTE BLANCHE ☐ DINERS CLUB

Acct. # _____ Exp. _____

Cardholder's Name _____

Name _____

Address _____

City _____ State _____ Zip _____

CG24

Visit our office & warehouse at: 729 Prospect Ave., Osceola, WI

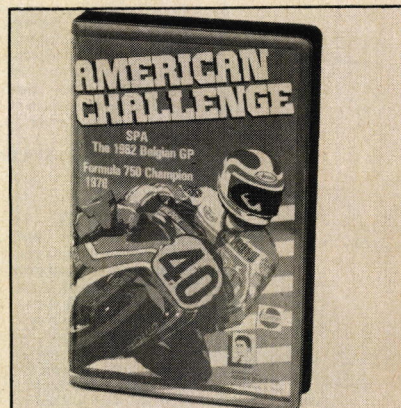
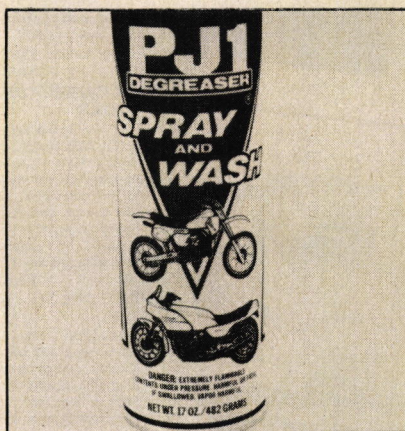
Motomart

New Year's cheers.

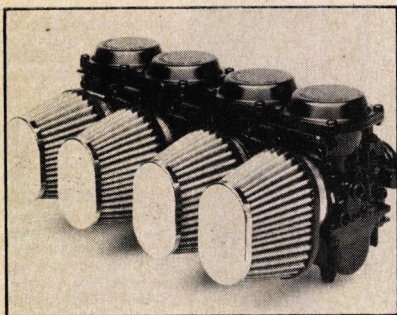


STOP: Grab your disc with S.B.S. asbestos-free brake pads. The Danish company claims that its brass-impregnated friction material won't absorb water, which improves wet-weather braking, and is easier on discs than pads containing copper. For rear brakes, S.B.S. makes a special low-friction pad that helps reduce the chance of rear-wheel lockup during hard braking. S.B.S. claims that its 57 varieties of brake pads will fit 24 brands of motorcycles and almost 800 individual models. Pad sets range in cost from \$11.90 to \$31.45. To learn more, contact IB CO International, Dept. CG, 5446 Oceanus Dr., Huntington Beach, California 92649.

Save Your Quarters: PJ1 motorcycle Spray and Wash degreaser is a gentle alternative to high-pressure washing. Spray it on, wait 10 minutes, and dirt and grease will rinse away, according to PJ1. The company also claims the specially formulated spray will not hurt rubber or plastic. A 17-ounce can sells for \$3.75 at motorcycle dealerships; if you can't find it there, write to PJ1, Dept. CG, 7345 Topanga Canyon Blvd., Canoga Park, California 91303.

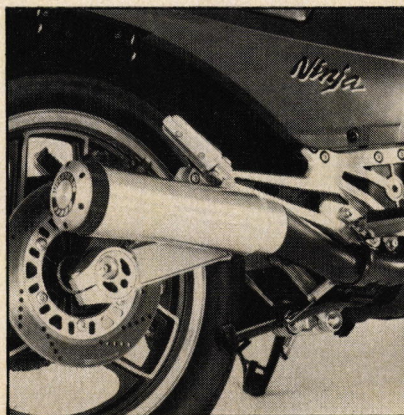


Racer's Tape: Videotape, that is, of Freddie Spencer winning the 1982 500cc Grand Prix at Spa, Belgium, and of Steve Baker competing in the 1977 Formula 1 World Championship. The 65-minute tape from Halmar also features the 250cc and sidecar races from Spa, as well as interviews with top GP stars such as Kenny Roberts. The tape is available in either Beta or VHS format for \$59.95. For a catalog and ordering information, write to Halmar, Dept. CG, P.O. Box 474, Lewiston, New York 14092.



Trap a Ninja: Supertrapp replacement mufflers for the Kawasaki Ninja give the look and sound of a high-performance exhaust system without the problems of installing a race pipe. The company claims the \$199.95 reverse-cone aluminum mufflers use the stock mounting hardware, and that the silencers weigh less than the stock items they replace. For more information on these mufflers and other Supertrapp products, write Supertrapp, Dept. CG, 1222 Research Park Dr., Davis, California 95616.

Breathe Easy: K&N Engineering's Intake Performance Kit is designed to make carburetor tuning easier on today's high-performance streetbikes. The kit includes K&N Filtercharger oval filters, crankcase vent filters and carb tuning parts, such as needles, jets, drills and spacers. The performance kit was designed specifically for CV carbs in conjunction with Dyno Jet Inc. K&N claims that 10 percent increases in peak power and 20 percent increases in midrange output are common with the kit. For more information on model applications and prices, contact K&N Engineering, Dept. CG, P.O. Box 1329, Riverside, California 92502.



All Pumped Up: Even though ATV tires operate at low pressure, a flat still can stop you cold. Stop & Go's ATV tubeless tire repair kit can get you going again. The kit has plugs for tubeless tires, an insertion tool, replacement valve core, and the Enginair pump to reinflate the tire. Included with the pump is a 62-inch hose and an in-line pressure gauge. The complete kit costs \$29.95, and Stop & Go claims it will fit under the seat of any ATV. Further details are available from Stop & Go International, Dept. CG, P.O. Box 544-D, Wheeling, Illinois 60090.

WISHBOOK

Minutes from the Last Meeting of the Council of Motorcycle Futurethink

I want to see more belt-drive motorcycles in the showrooms. Kawasaki's 440 and all the Harley belt-drives are reliable and trouble-free. The new Kawasaki 454 LTD should be much the same. I get tired of adjusting and lubing chains. Even the new O-ring chains require unnecessary maintenance. I also don't like shaft drives because of the weight, cost, effect on suspension, and the horsepower losses involved.

I like belt drives because, compared to shaft drives, they're light, don't cause

much horsepower loss and don't create chassis-jacking problems. Belts are better than chains because of the lack of lubrication and adjustment hassles. And belts are quieter than either shaft or chain.

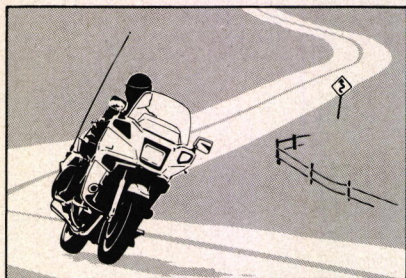
Maybe nobody's thought about how all these things add up to better fuel mileage, too.

Thomas Gates
Glendale, California

a macho motorcycle. When I look at the imitations, I'm reminded of decade-old Japanese bikes that also had styling not of this earth. Eventually, the designers stopped imitating and became truly original.

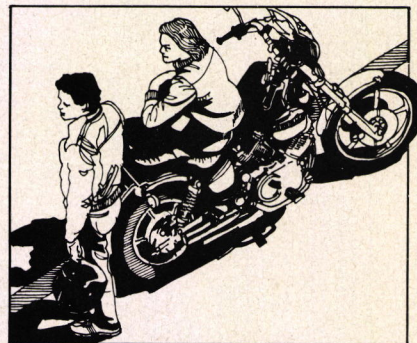
Forget the Harley look, Japan. Give us boulevard bandits, but start the designs from scratch.

Craig Watson
Juneau, Alaska



All this Japanese pseudo-cruiser stuff makes me want to lose my lunch. Every time I see one, I wonder what kind of Ugly Pills the designers are ingesting. Don't get me wrong: Nihon has made motorcycling into what it is today, especially in the sportbike arena. Japan virtually created the flash and thrills of apex-strafters.

That's the problem with the false-cruisers: Japan is copying Harley without any understanding of what goes into



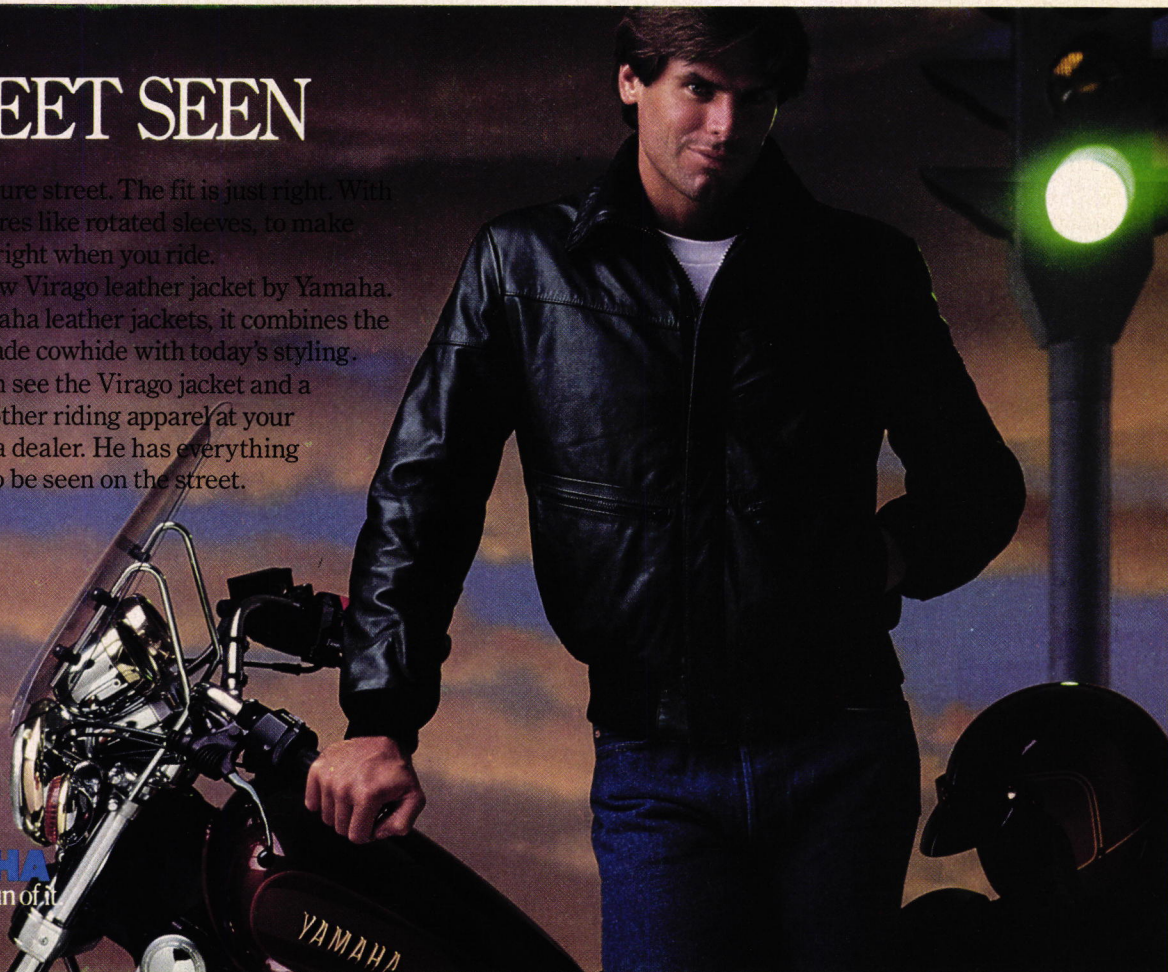
STREET SEEN

The look is pure street. The fit is just right. With special features like rotated sleeves, to make sure it stays right when you ride.

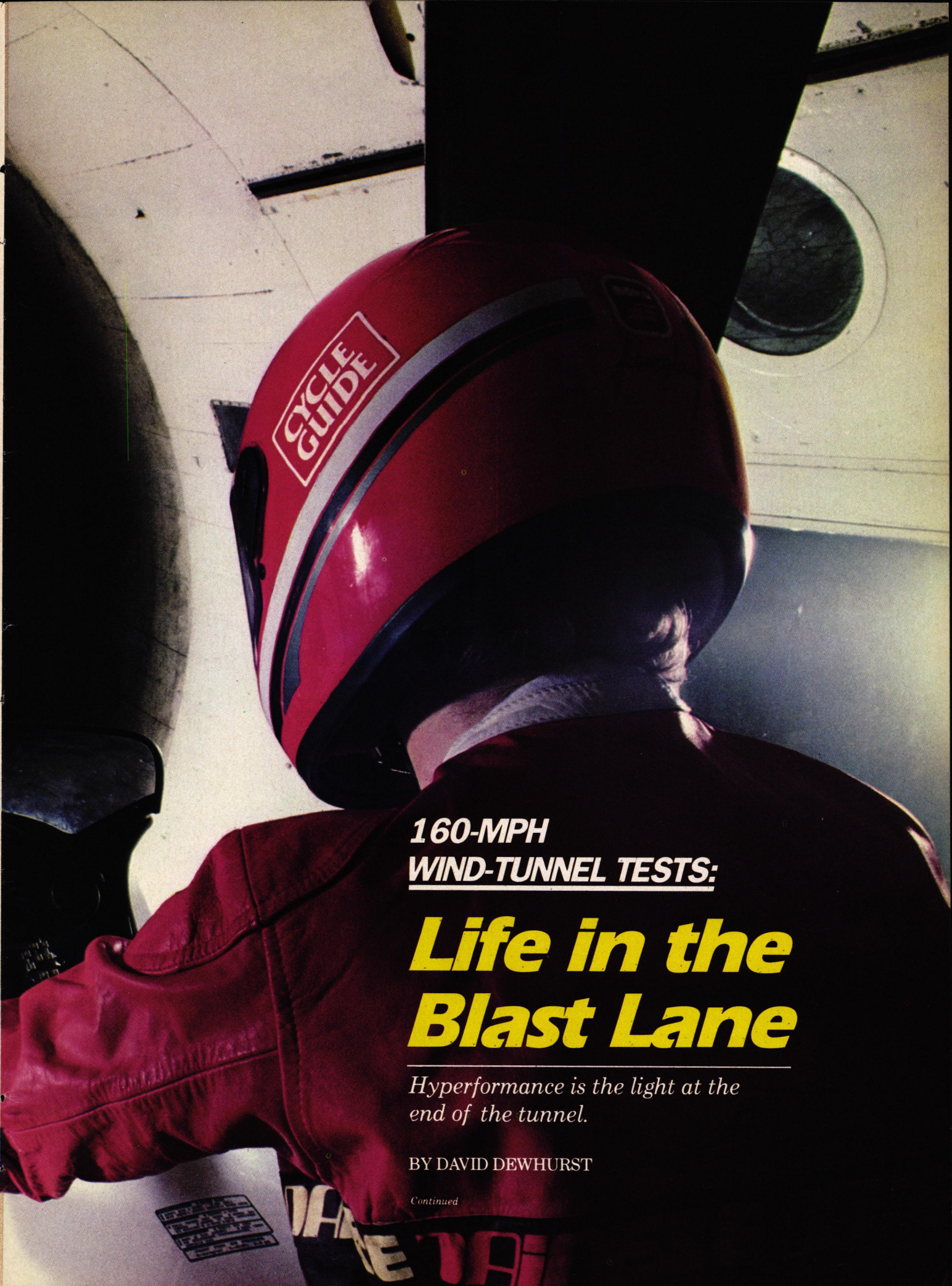
The new Virago leather jacket by Yamaha. Like all Yamaha leather jackets, it combines the finest top grade cowhide with today's styling.

You can see the Virago jacket and a whole lot of other riding apparel at your local Yamaha dealer. He has everything you'll want to be seen on the street.

YAMAHA
Built for the fun of it.







A person is shown from behind, wearing a red motorcycle helmet and a red leather jacket. The helmet has a white and blue stripe and a logo that reads "CYCLE GUIDE". The person is in a wind tunnel, with a large circular opening visible in the background. The lighting is dramatic, with strong highlights and shadows.

**CYCLE
GUIDE**

**160-MPH
WIND-TUNNEL TESTS:**

Life in the Blast Lane

*Hyperformance is the light at the
end of the tunnel.*

BY DAVID DEWHURST

Continued

There's some fresh air blowing in motorcycle design, and it's long overdue. You've probably never considered it, but your streetbike and Kenny Robert's Daytona-winning OW69 roadracer have one major performance feature in common: They each punch a hole in the wind about as efficiently as an oversized brick. By comparison, an average sedan is as sleek as a rocket.

It's no secret that bikes have been in the aerodynamic Dark Ages, and their speed, handling and fuel economy have suffered because of it. Motorcycling's traditional method of attaining high performance has been to apply megadoses of horsepower; but that tack poses its own set of problems. Roberts' wheelie-prone OW69 is a prime example of a bike that has more power than it needs in the turns just so it can push hard enough against the wind to go fast down the straights—and your bike is not much different.

While plane, car and train designers have devised shapes that can cleave the wind, motorcycle designers haven't yet tackled all the problems of aerodynamic efficiency. Sure, there are plenty of examples of fairings that protect the rider from the wind, but improving overall airflow around a bike is still something of a dark art.

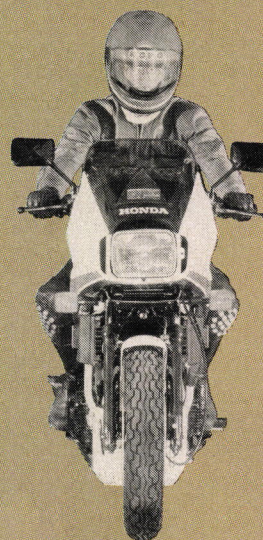
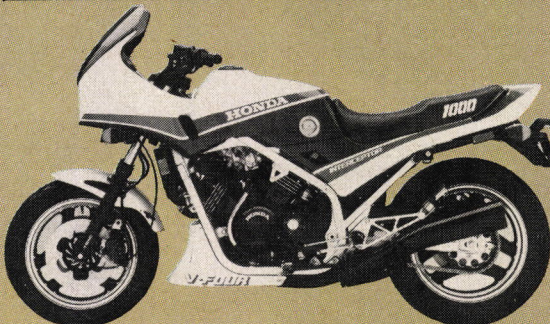
Things *are* starting to improve, though, as motorcycle designers finally take advantage of careful air management. In fact, most modern motorcycles have undergone *some* testing in a wind tunnel. But so far, that research has been aimed primarily at solving isolated, specific problems, such as engine cooling and improving rider protection. Wraparound front fenders, as on Yamaha's FJ1100 and Suzuki's GS1150ES, upswept fork braces, and the now-common fairing are obvious examples of this newfound concern. To date, though, motorcycle designers haven't concentrated on improving *overall* aerodynamic efficiency, and what little research has been conducted is shrouded in secrecy.

Which led to two inescapable conclusions: If we were going to find out the truth about motorcycle aerodynamics, we'd have to conduct scientific tests of our own. And the only place to measure aerodynamic efficiency accurately is in the carefully calibrated confines of a wind tunnel. We chose the California Institute of Technology wind tunnel in Pasadena, California, which has been used to evaluate the aerodynamics of everything from smokestacks to the latest jet fighters. Motorcycles, too, have been seen inside the Cal-Tech tunnel, but, the results

Continued

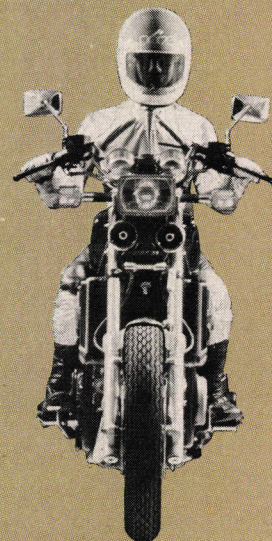
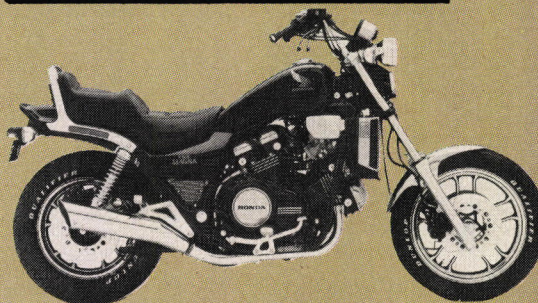
VF1000F VF1000F (no rider)

C_D	0.6412	0.5725
C_{DA}	4.7961	4.2826
C_{LFA}	2.4470	2.0110
C_{LRA}	-2.0290	-1.9080
C_{ICG}	0.0472	0.0037
C_C	0.0587	0.0067
Area	7.48 sq.ft.	5.25 sq.ft.



V65 Magna V65 Magna (no rider)

C_D	0.7786	0.4820
C_{DA}	6.5090	4.0296
C_{LFA}	3.6520	2.1200
C_{LRA}	-2.9000	-1.6410
C_{ICG}	0.0337	0.0009
C_C	0.0493	0.0021
Area	8.36 sq.ft.	5.25 sq.ft.



Rifle

C_D	0.3627
C_{DA}	1.5814
C_{LFA}	-0.5110
C_{LRA}	0.2310
C_{ICG}	0.0493
C_C	0.0810
Area	4.36 sq.ft.



Tunnel Visions

Where nature gets down to science.

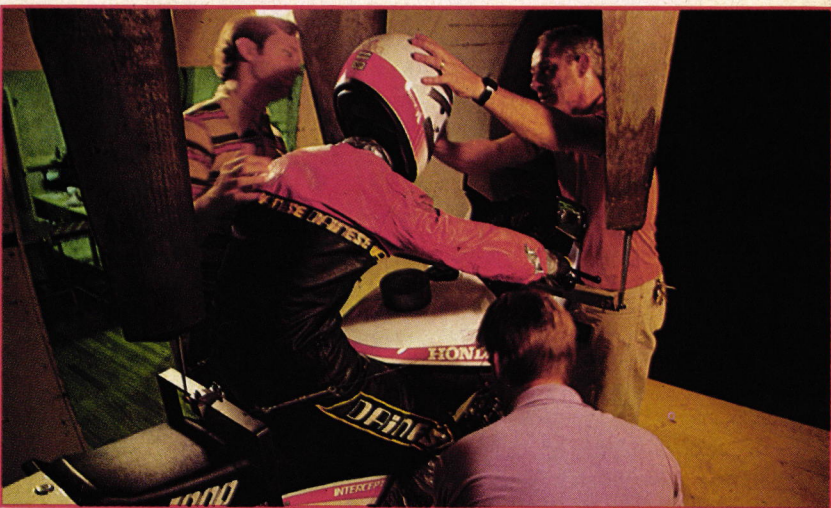
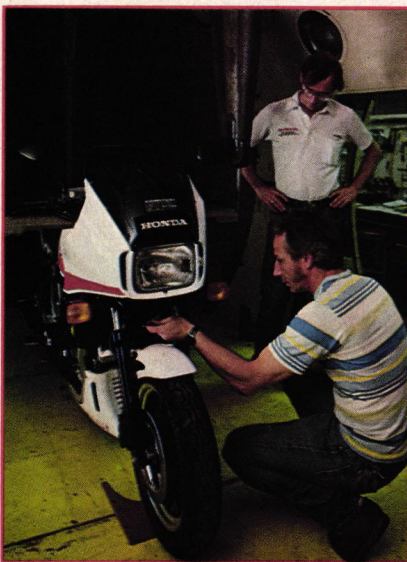
• It is awe-inspiring: To watch a huge, 1-inch-thick piece of plywood fluttering like a leaf; to see a 536-pound motorcycle buffeting back and forth, shaken as if by the hand of God. But there is nothing to indicate the forces involved: There are no visual cues, no suspension or wheel movement, just a deafening howl as the air whips by the bike at nearly 90 mph. Viewed through the curved glass doors, the brightly lit motorcycle seems almost super-real, and as it snaps back and forth you begin to understand why wind is nothing to be trifled with.

Motorcyclists are intimately familiar with the wind, but it's often viewed with a wind-in-your-face type of romanticism. What goes on at the California Institute of Technology's 10-foot wind tunnel, however, is hard-numbers physics, and gives you a completely different appreciation for that breeze on your cheeks. Moving through air—or simply moving air—requires sheer horsepower. For example, the Cal-Tech wind tunnel can generate the equivalent of 160 mph. But getting the air in the tunnel up to that speed—and keeping it there—requires 950 horsepower.

Even with that much horsepower, Cal-Tech's electric motor can only generate a relative breeze of 40 mph, maximum; the tunnel necks down to a 10-foot diameter at the test station, and the resulting venturi quadruples the air's speed as it passes the motorcycle. Before that, though, the bike has to be hoisted up into the second-story testing station, muscled into the tunnel and then suspended $\frac{1}{8}$ -inch above the ground plane by three struts, which are carefully faired in to keep their effect on the air-flow to a minimum. The ground plane is braced, 1-inch-thick plywood, solid enough to support the weight of four men and a 700-pound motorcycle. But with a 90-mph wind whipping over the bike, the turbulence flutters the edge of that plywood sheet like paper in a fan. It's a demonstration you won't forget.

Without watching the intricate balances and recording machinery located above the tunnel, it's easy to forget this is scientific experimentation: Most people consider scientific experiments to be as dramatic as watching mold grow in a petri dish. But watching the tests at the Graduate Aeronautical Laboratories at California's Institute of Technology isn't simply awe-inspiring; it's almost frightening.

—Jim Miller



of that testing have remained a closely guarded secret.

Naturally, we wanted to round up every bike ever built for the tunnel-test, but practicality narrowed our testing to five motorcycles. Our choices, arguable as they might be, were made to cover the entire motorcycling spectrum, to point out the inherent aerodynamic differences between different *types* of motorcycles. To represent one extreme, we selected the totally enclosed Rifle Yamaha that won the 1983 Craig Vetter Fuel Economy Run. At the other end of the scale, Yamaha's Venture Royale seemed a perfect choice for a motorcycle designed for complete rider protection—at any aerodynamic cost. To fill out the space between those absolutes, we chose Honda's VF1000F sportbike and the V65 Magna cruise missile, two bikes whose 7-mph disparity in measured top speed (See "Speed Wars," June 1984 issue) seemed attributable largely to aerodynamic differences. With those four secured, we lacked only a racebike to put to the test. And what better choice than the world's fastest roadracer, Yamaha's OW69, which has proven its speed potential dozens of times down the back straight at Daytona?

But tunnel-testing is more than simply choosing the bikes and parking them in

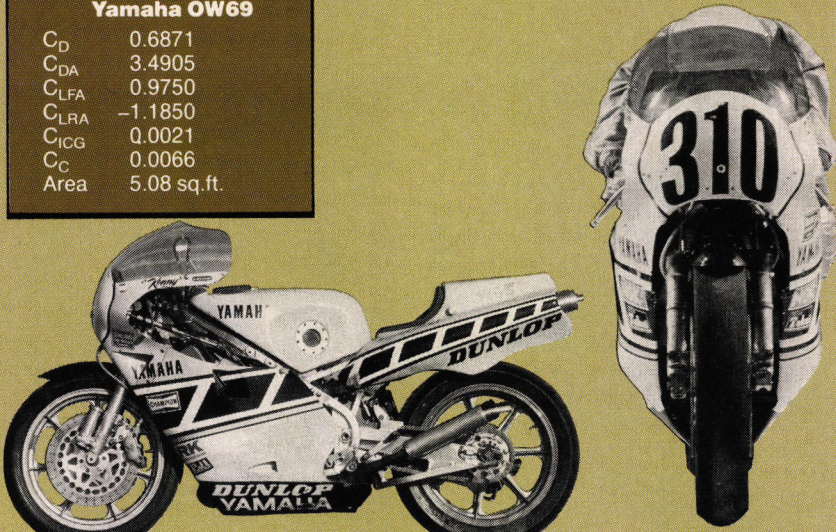
Speed (MPH)		Dynamic Pressure (q)
40	=	3.863
55	=	7.304
80	=	15.454
120	=	34.771
150	=	54.329
180	=	78.234

the blast tube. Each of the five had its suspension compressed and wired in position to approximate average ride height. Then, each bike in turn was bolted to the three vertical supports protruding from the roof of the tunnel. Fine adjustments were made to insure that each bike was suspended with both wheels exactly 1/8-inch above the fixed ground plane inside the tunnel. The three supports holding the motorcycle—two at the front and one at the rear of the bike—transmit forces acting on the bike through a complex linkage system to six balances in the measuring room two floors above the tunnel itself.

With no wind blowing through the tunnel, the balances were zeroed. Each balance provided one of the six coefficients measured during the test: lift (C_L), drag

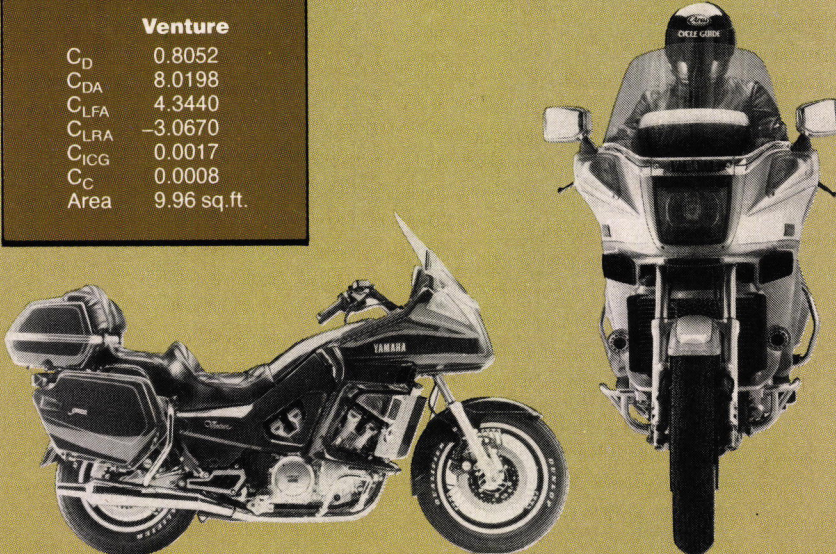
Yamaha OW69

C_D	0.6871
C_{DA}	3.4905
C_{LFA}	0.9750
C_{LRA}	-1.1850
C_{ICG}	0.0021
C_C	0.0066
Area	5.08 sq. ft.



Venture

C_D	0.8052
C_{DA}	8.0198
C_{LFA}	4.3440
C_{LRA}	-3.0670
C_{ICG}	0.0017
C_C	0.0008
Area	9.96 sq. ft.



(C_{DA}), side forces (C_C), pitching moment (C_{MCG}), yawing moment (C_{ICG}) and rolling moment (C_{NCG}). Airspeed inside the tunnel can be varied from 40 mph to 160 mph, and any force acting on the bike is measured as a positive or negative number of pounds on the balances.

Those measurements can't tell the whole story, though, because they don't take into account one critical factor: frontal area. That measurement plays a large part in aerodynamics, because no matter how efficiently an object parts the air, the bigger its frontal area, the more power required to move it. One major difference between motorcycles and most other vehicles is the role the rider plays in aerodynamic efficiency. To learn just how important that role is, we calculated each bike's frontal area from head-on photo-

graphs, both with and without our leathers-clad dummy Zeph in the saddle. There's an astonishing difference; the most glaring example is Honda's Magna, which gained a massive 59.2 percent in frontal area with Zeph in a normal upright position. And the VF1000F, with its fairing, lower bars and more rearset pegs, gained 42.0 percent in frontal area with Zeph aboard. Even the fully faired Rifle bike shows a 7.6-percent increase with Zeph stuffed into the cockpit.

As we discovered when we finally turned on the fan, a rider not only makes a difference in the amount of air he has to punch a hole through, but in *how* he does it. The drag coefficient—which shows the efficiency of airflow over an object—for the VF1000F and V65 showed a remarkable difference. Riderless, the V65 had a

Continued

The Aerospeak Lexicon

Not just another long-winded speech.

• The jargon of aerodynamics might sound unintelligible, but the facts of aerodynamics can be easily understood. That's because anyone who has held his hand out of a car window at speed has an elementary knowledge of the subject. So you shouldn't let the highfalutin terms get in the way of understanding the fundamental concepts.

The central term in aerodynamics is Drag, the force exerted against any object moving through the air. For instance, sticking your hand outside a moving car's window causes drag, and you have to push forward against the wind to overcome the force. If it took the same effort to push against that wind as, say, lifting a 10-pound weight above your head, your hand would be generating 10 pounds of aerodynamic drag.

Moreover, the amount of effort you're forced to exert against the air increases dramatically if the car's speed increases. And that illustrates one of the true battles of aerodynamics: Double the speed, and the dynamic air pressure becomes four times as great. So, while a motorcycle doesn't have to push very hard against the wind at 30 mph, it must push four times as hard at 60 mph.

There are ways to reduce aerodynamic drag, though, and the simplest of all is to make the object more streamlined. If you stuck a clenched fist out of a moving car's window, instead of holding your hand out with the palm forward, you'd have to exert less force, because the wind flows more easily around the rounded shape of a fist than it does against a flat palm. That airflowing efficiency of a body's shape is quantified as its Coefficient of drag, or C_D .

C_D describes how efficiently a shape cuts the wind, but a body's overall aerodynamic efficiency also depends on its frontal area. For example, imagine a bike and rider coming straight toward you as the sun sets behind them. Their silhouetted outline would be their total frontal area. Now, suppose the rider crouched down behind the bars. The C_D might not change at all, but the frontal area would be reduced, and this in turn would reduce total drag. The Coefficient of Total Drag is designated as C_{DA} , and is a direct result of multiplying C_D by frontal area.

So far, we've assumed that drag only resists an object's forward motion through the air; not so. As air flows around certain shapes, it can also cause vertical components of lift or

downforce—in aerodynamics, lift is always given as a positive number, and downforce is negative. Like all the other coefficients listed below, the coefficients of lift at the front and rear wheels— C_{LFA} and C_{LRA} —can be multiplied by the dynamic pressure— q —corresponding to any given speed, with the result being the amount of force in pounds exerted against the bike. If the speed and lift are great enough, some bikes might even lift their front wheels like a 747 on takeoff.

Two other coefficients also describe a

body's aerodynamics. There's a tendency to pivot about the vertical axis, known as Yaw, which is listed as C_{ICG} . And, as anyone who's ridden in a cross-wind knows, bikes also try to pivot about their longitudinal axis. This is known as Roll, and is listed as C_C .

Lower numbers indicate a more aerodynamically efficient shape, and, compared to most other vehicles, bikes figure poorly in all but frontal area. And, if you're still wondering which shape does give the best results in the above categories, it's the teardrop. So, if trying to figure out aerodynamics still drives you to tears, the perfect answer might be rolling right down your face.

—Don Fuller



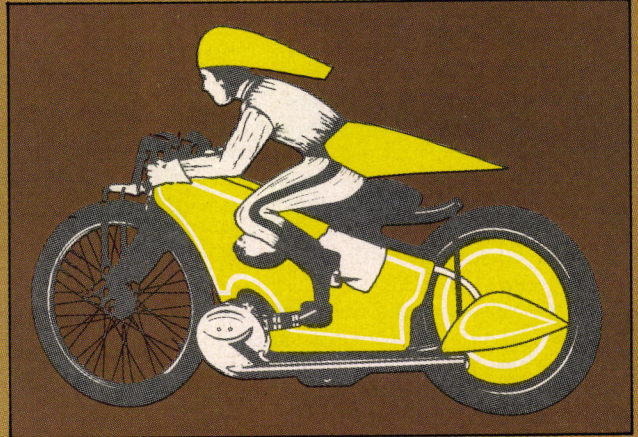
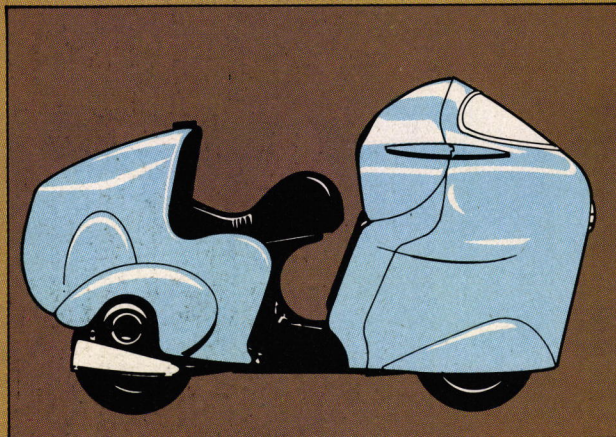
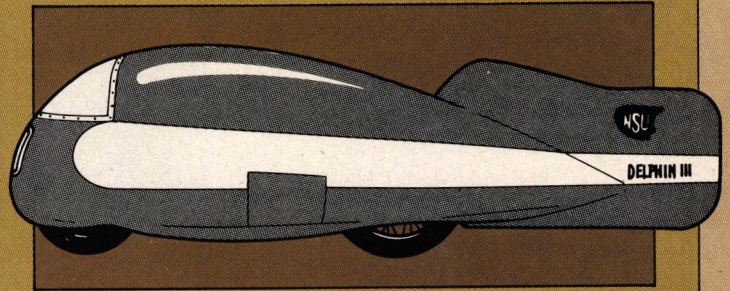
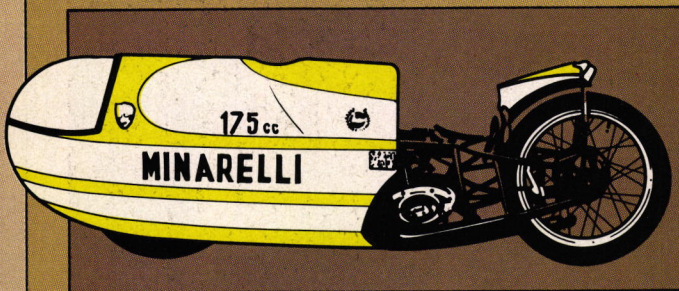
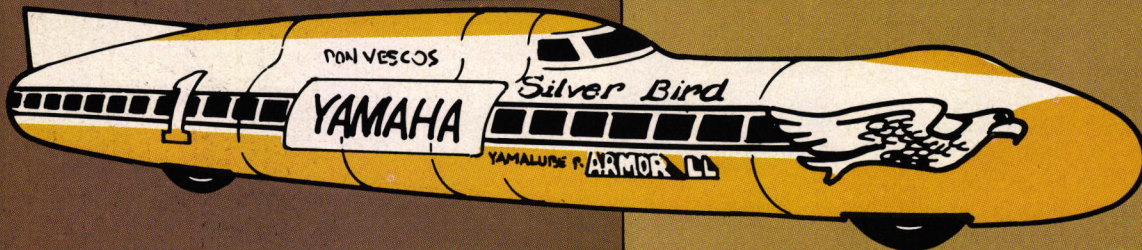
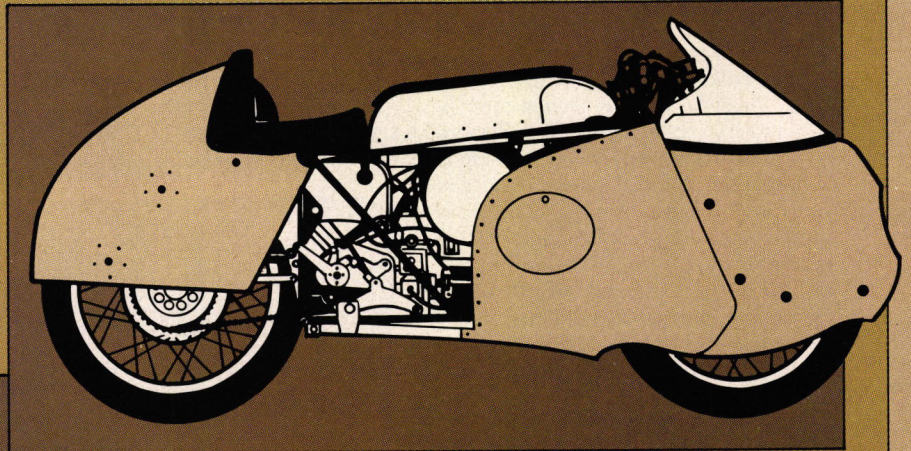
Aerodynamics: Blasts from the Past

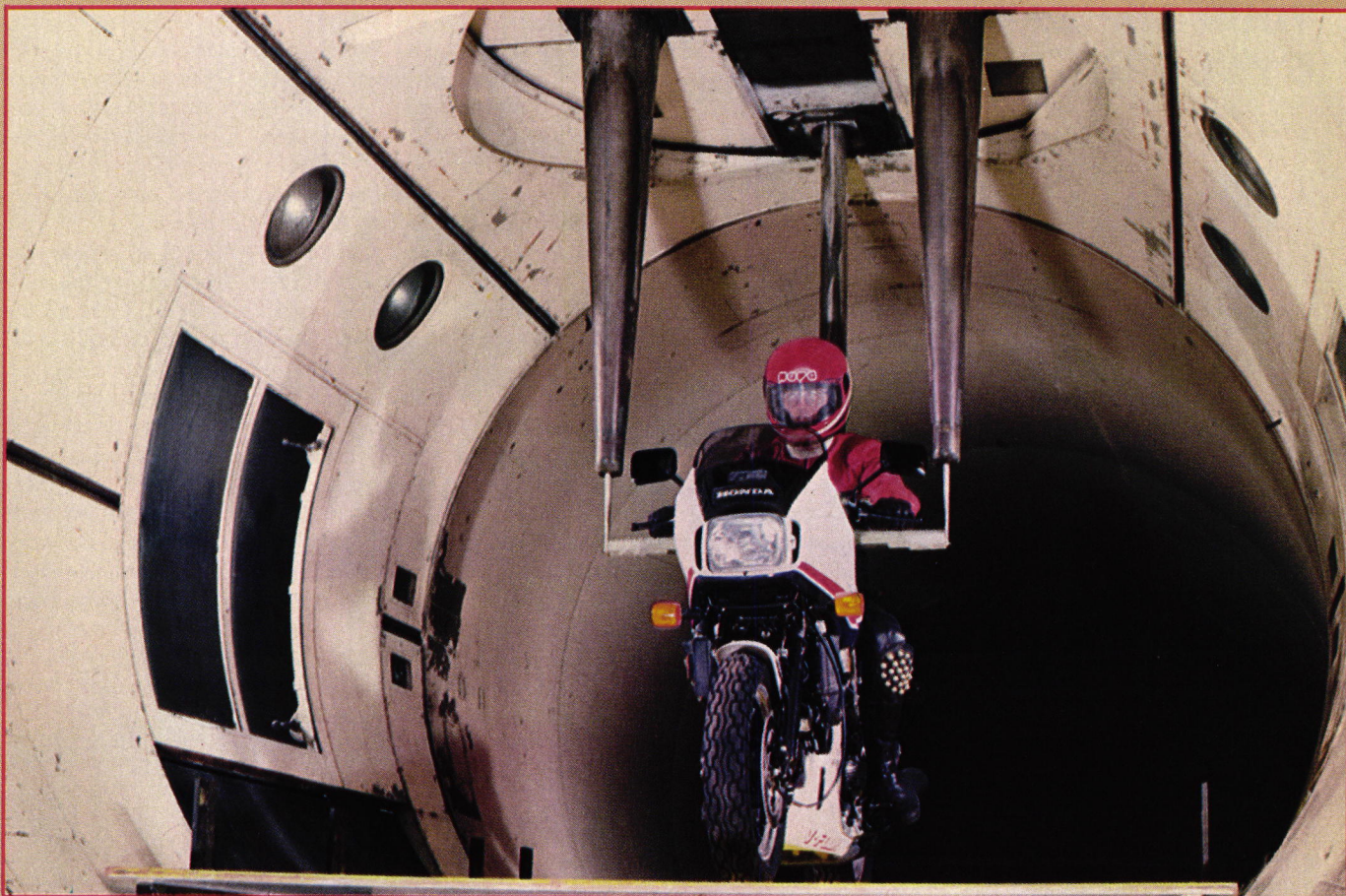
• Aerodynamics might seem to be the most unexplored frontier of high performance in motorcycling, but that's really not the case. For decades, imaginative designers have come up with schemes to improve on the motorcycle's brick-like C_D . Some firms, such as BMW, have recognized the rider's influence on streamlining, and concentrated on his profile, as exemplified by Ernst Henne's elongated helmet and high-speed bustle.

Most other manufacturers dealt with the motorcycle itself, resulting in designs that range from the ridiculous to the sublime. Take, for instance, Vespa's 125 scooter, a product of the sales wars between Vespa and Lambretta; or the NSU Delphin III, from the mind of Gustav Baumm, a pioneer in the design of motorcycle aerodynamics; or the Minarelli Carlotta 175, holder of five world records in 1971. Nor was stream-

lining unknown in Grand Prix roadracing: Moto Guzzi's 350, with its dustbin-style fairing, was typical of its day, although the FIM outlawed such fairings in 1957. And on a more contemporary note, there's Don Vesco's Silver Bird Yamaha streamliner, the first motorcycle to break 300 mph.

One thing is for certain, though: No matter what the field of combat, whether on road courses or the sun-baked salt flats of Bonneville, as long as there are fertile minds, there will be answers to the problem of cheating the wind. And they'll owe much to solutions that have gone before. —Charles Everitt





C_D of 0.48; with Zeph aboard, though, the number jumped to 0.78. The VF1000F's C_D started at a less-impressive 0.56, but rose only to 0.64 with a rider in place. Combine those C_D numbers with frontal area to get C_{DA} , and a far more startling figure emerges: The bolt-upright Magna rider adds an incredible 60 percent of total drag to the bike, while the crouched and fairing-protected VF1000F rider adds only 11 percent.

Stripped of some of the numbers, what the comparison shows is that while the VF1000F's small fairing doesn't flow air too well on its own—a C_D of 0.56 is not particularly good—it parts the air and directs it around the rider quite well. Meanwhile, the V65 starts off pretty “clean” aerodynamically, but the effect of the upright rider is not unlike like that of a giant parachute. More to the point, the comparison supports the notion that getting the rider out of the windstream can have aerodynamic benefits.

But there's far more to good aerodynamics than just hiding the rider behind a sheet of plastic. For proof, you need look no further than the wind-tunnel numbers for the Yamaha Venture to see that directing air around the rider can result in a high C_D , with predictable negative effects on both fuel mileage and top

We've been in the wind tunnel. We've seen the future. And it's streamlined.

speed. But the shape of the Venture's fairing makes it clear that rider protection—a legitimate goal—not overall aerodynamic efficiency, was the major design concern.

Of course, increased performance also is a valid goal. Achieving that goal requires a fine balance of both rider position and wind protection that can produce the next best thing to free horsepower. For example, one manufacturer claims that one of its sportbikes will go 5 mph faster with its small fairing (which provides some degree of rider protection) in place than without it. Even more interesting is the claim that this bike, if unfaired, would need an extra 10 horsepower to make up that speed difference. If a half-fairing can be worth 10 horsepower—or more—it should be clear that aerodynamics can unlock the performance potential for tomorrow's motorcycles. Further, we believe aerodynamic ef-

iciency represents a far more practical solution than simply throwing horsepower into the wind.

Nonetheless, while we don't see full streamliners as the ultimate solution, there are advantages to fully enclosed motorcycles. For instance, of the bikes we tested, only the Rifle Yamaha came close to presenting an ideal shape to the wind. The Rifle's rounded, blunt nose cuts the wind efficiently, but more important, its smooth, tapered rear body section keeps the air flowing without promoting drag-inducing turbulence as the flow continues back along, and behind, the bike. But compared to the sub-0.3 C_D figures generated by some automobiles, the Rifle's C_D of 0.3627 shows that even this econo-champ's teardrop shape isn't perfect. And once again, the problem mostly relates to the rider. Just the small bit of helmet protruding over the screen, along with the gap between the rider's back and the fairing sides, helps disturb the airflow enough to increase drag.

Despite its slightly less-than-perfect shape, the Rifle bike has one important trait the other test bikes lack: It uses the wind to push its tires *down* against the road. The Rifle acts like an inverted airfoil, increasing air pressure on its upper surface to push the vehicle down. While

Continued

YOUR COPIES OF CYCLE GUIDE



HANDSOMELY DISPLAYED AND PROTECTED.

Use these attractively designed library cases, in binder or slip-style to keep an organized, preserved referral to your collection of CYCLE GUIDE issues.

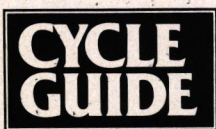
These durable organizers come in rich burgandy and are crafted in handsome simulated leather.

Each case or binder holds up to 12 issues of your valued CYCLE GUIDE.

LIBRARY CASES are \$5.95 ea., 3 for \$17.00, and 6 for \$30.00. BINDERS are \$7.50 ea., 3 for \$21.95, and 6 for \$42.00.

Post paid in USA. Add \$2.50 per unit for orders outside USA.

Satisfaction guaranteed or money back. Allow 5 weeks for delivery.



**CYCLE GUIDE, P.O. Box 5120
PHILADELPHIA, PA. 19141**

Please Send Me:

BINDERS

- ☐ \$7.50 Ea.
☐ 3 For \$21.95
☐ 6 For \$42.00

SLIP CASES

- ☐ \$5.95 Ea.
☐ 3 For \$17.00
☐ 6 For \$30.00

Orders outside USA add \$2.50 per unit for postage and handling. Payment must accompany order.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

WIND TUNNEL *Continued*

each of the other bikes generates downforce on the rear wheel, they all displayed lift at the front wheel, a tendency that increased with a rider aboard. As an example, the VF1000F at a simulated speed of 150 mph generates 138 pounds of lift at the front axle. That's more than half the static weight on its front end. If the Yamaha Venture were capable of the same 150-mph speed, it would generate an incredible 247 pounds of lift. If the big Yamaha could reach 180 mph, its front wheel would lift off like the nosewheel of a 747. Bringing things back down to earth, the lift generated at the front wheel even at moderate speeds reduces the front tire's contact patch and can cause a vague steering feel that often is blamed on poor tires or even poorer frame design.

Front-end lift plagues the super-streamlined OW69 Yamaha, too. At the 180 mph it can reach on a racetrack, the OW generates 78 pounds of lift at the front end. The OW69's C_D also shows

that despite its streamlined appearance, the Yamaha is no cleaner than the V65 Magna. Only the OW's relatively small frontal area helped reduce total drag, and allowed Roberts' racebike to rocket toward Daytona's chicane.

Total drag wasn't the only factor affecting Roberts' bike—and isn't the only one that affects yours. Turbulence also enters into the equation. As we found in the wind tunnel, the OW69—like all the bikes we tested—rocked strongly from side to side in its own churning air. Yawing the bike—pivoting the motorcycle about its vertical axis to simulate its reaction to crosswinds—only increased the turbulence. That turbulence, combined with lift at the front axle, accounts for much of the head-shaking and instability inherent to some motorcycles at extremely high speeds. But we also found fairings can pose problems in crosswinds: The unfaired Magna exhibited more crosswind stability than any of the other four bikes tested.

And The Winner Is

• Numbers normally make bikes look pretty impressive. Whether it's a quarter-mile elapsed time, top speed or race-track lap time, bike numbers look good. But that's not the case when the numbers in question quantify a two-wheeler's aerodynamic prowess. To put things in clearer perspective, compare the "average" motorcycle's C_D numbers with those of common objects.

Flat plate	1.17
Cube	1.05
Cube, angled one point to the wind	0.80
Seated person	0.60
Average motorcycle	0.57-0.80
Convertible sedan	0.50-0.70
Railroad car	0.50
60-degree cone, point forward	0.50
Sphere	0.47
City bus	0.45-0.50
American sedan, square corners	0.45-0.50
Modern sportscar	0.32-0.36
State-of-the-art sedan:	
Audi 5000	0.30
Bullet	0.25-0.30
Teardrop (3:1 length-to-thickness ratio)	0.04-0.05

Whichever way you stack these numbers, motorcycles don't look impressive, and a careful look at the comparison list offers a suggestion as to why: The wind-cutting shape at the front of an object isn't the only thing that affects C_D . If that were the case, a flat-fronted city bus surely would finish high up the C_D

list along with a flat plate.

The reason is that forebody drag— aerodynamic drag caused by the front of an object—is only part of the picture. What really makes the difference is the way the air flows over the body once it's been parted. Any turbulence over the rear of an object is referred to as aftbody drag. A perfect example of how much effect aftbody drag has can be seen by comparing the C_D numbers for a sphere and a teardrop, which have identical forebody shapes. Such a dramatic difference—a C_D of 0.04 for a teardrop and 0.47 for a sphere—can only come about because the tapering rear section of the teardrop keeps the air flowing more smoothly once the rounded front end has parted it.

Motorcycles are much like the sphere, with none of the essential tapering rear sections to reduce aftbody drag. Conversely, the flat-fronted city bus acts like a very inefficient teardrop, thanks to its long, smooth sides, which help reduce aftbody drag.

Ways of reducing a two-wheeler's aftbody drag already have been tried. Olympic speed cyclists, for example, once wore helmets with rear cones that helped them win gold medals by improving aftbody drag. And who knows? Motorcyclists might resort to similar styles in a quest for higher performance. Because only by looking behind can motorcycling look forward to an aerodynamically efficient future.

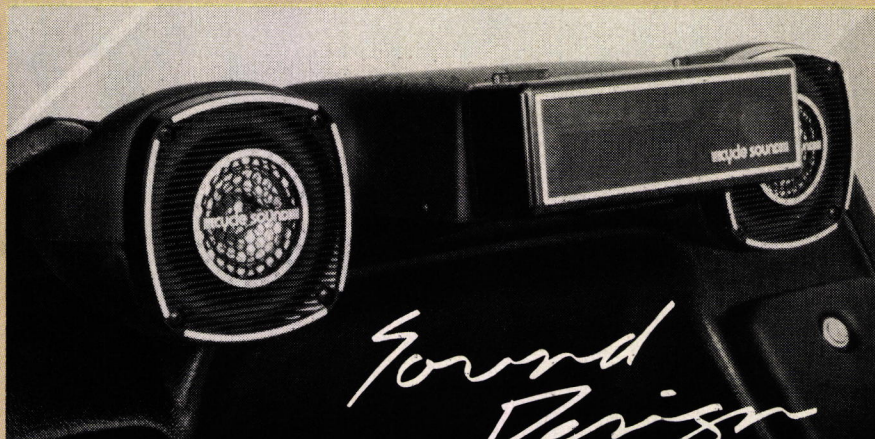
—Don Fuller

Still, increased side forces were the greatest negative effect the wind-tunnel uncovered about streamlining. And the advantages are legion: increased performance, decreased fuel consumption, improved handling, and more complete wind protection for the rider. As the Rifle bike proved, a fairing need not induce front-end lift. And the Venture demonstrated that a fairing can offer almost complete wind protection, even for a rider in an upright seating position. In the VF1000F's case, we found that a degree of wind protection for the rider doesn't have to come at the expense of greatly increased frontal area.

With all the advantages aerodynamics offers, we're convinced that motorcycling's next frontier of high performance is at hand. Exploring that new frontier won't be easy, and it won't be cheap. Cost, concern over public rejection and the need for radical new motorcycle designs are the all-too-real obstacles the manufacturers face.



We know those obstacles can be overcome. The manufacturers have shown an almost uncanny ability to solve any technical problem they turn their attention to. And they're already on the case. As we found in the wind tunnel, *individual* aerodynamic considerations have already been addressed. It won't be long before the manufacturers integrate the individual solutions to those separate aerodynamic problems into a complete package that will shake the foundations of motorcycling. We've been in the wind tunnel. We've seen the future. And it's streamlined.



Sound Design

Sound design is in all our Cycle Sound systems. More clear sound, more power and more features are designed into our high-performance sound systems than anything else on the road.

Cycle Sound standard \$89.95
Cycle Sound coaxial (shown) \$109.95

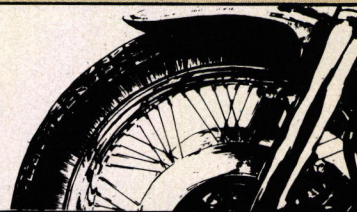
For more information call toll free:
1-800-531-5352
or write:
cycle sound
DIVISION OF HOESE CORPORATION
P.O. Box 41 Bulverde, TX 78163

**Responsible drinking works
like your bike's brakes:**

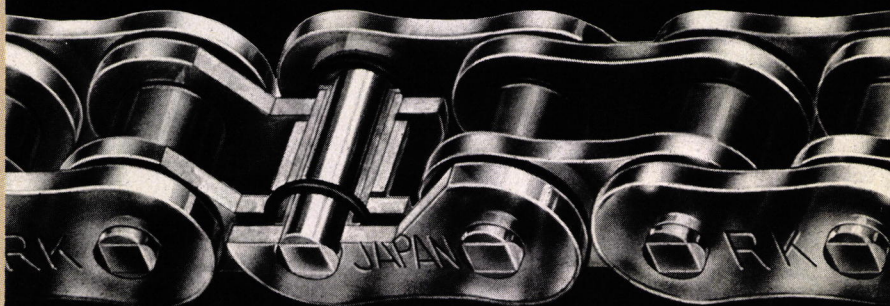
**You have to know how to stop.
And when.**

AMA

American Motorcyclist Association,
P.O. Box 141, Westerville, Ohio 43081



RK 20,000 MILE "O-RING" WARRANTY



"Legendary Strength and Durability"

Top Pros and Factory Teams like Freddie Spencer, Team Honda Racing, Team Yamaha and others don't really need the RK CHAIN 20,000 mile warranty, but they know why we can offer it.

RK builds each chain as if our reputation and theirs depended on it. That's why with every RK O-RING CHAIN you get a no-hassle 20,000 mile limited warranty for street use, or a 5,000 mile or one year warranty for off-road use.

**Motorcycle
RK Chain**
Takasago Chain Co. Ltd.

*"World Class Chain
for World Class Riders"*

Send \$10 to FTM & ASSOCIATES, 550 West Regent Street, Unit 301, Inglewood, CA 90301 for your RK Freddie Spencer T-Shirt & Racing Patch plus an RK mail-order catalog.

CAMEL LIGHTS

It's a whole new world.



Today's
Camel Lights,
unexpectedly mild.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

9 mg. "tar", 0.8 mg. nicotine av. per cigarette by FTC method.

GUIDE LINES

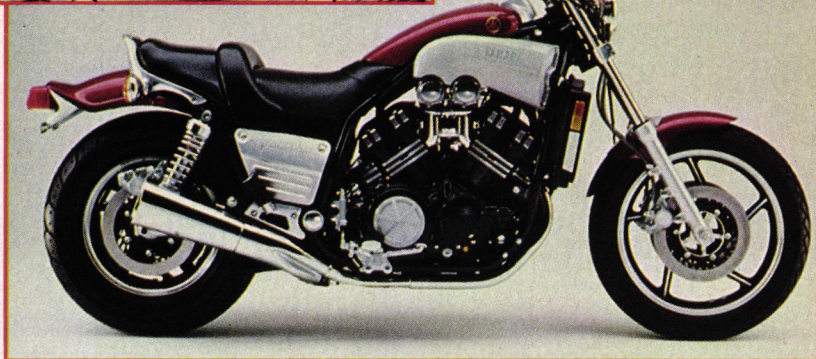
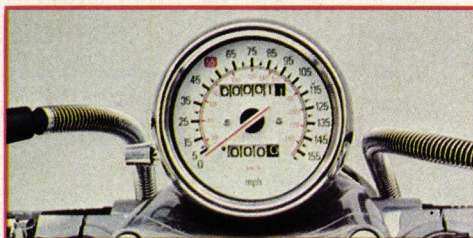
Cycle Guide's Monthly Chronicle of Scoops, Tips, Rumors and Hard Facts

BY JOE KRESS

COMING SOON

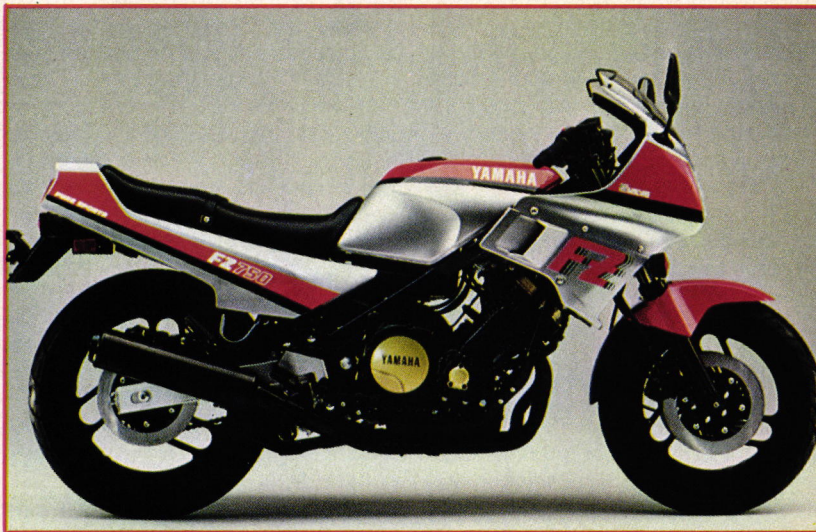
• Traditionally, American riders have shown a marked preference for muscular motorcycles; bikes with raw power, and all the subtlety of a Larry Holmes punch to the gut. Yamaha's new 1198cc V-MAX speaks directly to that desire. Designed for and marketed *only* in America, the V-MAX is a no-holds-barred street brawler with a 135-claimed-horsepower knockout punch. And, despite the similarities between their engines, the V-MAX definitely is not just a stripped-down Venture Royale. The two engines are similar, but the V-MAX's vee-four has been hot-rodded and beefed-up top to bottom, with bigger valves than the Venture's, more radical cam timing, lighter pistons and a strengthened crankshaft and gearbox. Plus, that horsepower-rich motor is mounted in an all-new frame that rolls on a huge 150/90-15 rear tire. And no Venture ever came with V-Boost, the V-MAX's unusual intake system. With V-Boost, each cylinder is fed by its own downdraft carburetor, as per conventional practice. But at 5000 rpm, a servomotor begins to open a butterfly valve between each pair of intake tracts, so that two carburetors can feed each cylinder on an intake stroke; the butterflies open fully at 8000 rpm. Like we said, Yamaha's V-MAX speaks directly to America's love affair with brutally fast machinery. It should be an interesting year on the streets—and the dragstrips.

• Not every rider subscribes to the brute-force theory, though; some want a little finesse mixed in the package. Yamaha's FZ750 should fit that need nicely. Powered by Yamaha's "Genesis" motor, a 750cc liquid-cooled, double overhead cam, transverse inline-four with *five* valves per cylinder, this 11,000-rpm sport rocket also promises deft handling to go with its claimed 95 horsepower. Yamaha says the FZ has a 49.5 percent/50.5 percent front-to-rear weight distribution for good handling, and, just as important, a low center of gravity due to the engine cylinders' 45-degree forward inclination. That forward tilt of the engine also helps power production, too, by allowing ruler-straight intake ports. And if all this high-performance hardware makes you think Superbike racing, you're not alone. To make the switch from license plate to numberplate even easier, Yamaha has offset the FZ's drive chain, so there's plenty of room for superwide (150-se-



Hold onto your hat and grab a stopwatch: Yamaha's V-MAX is about to light 'em up

At the end of this bike's first run we might have a new quarter-mile king.



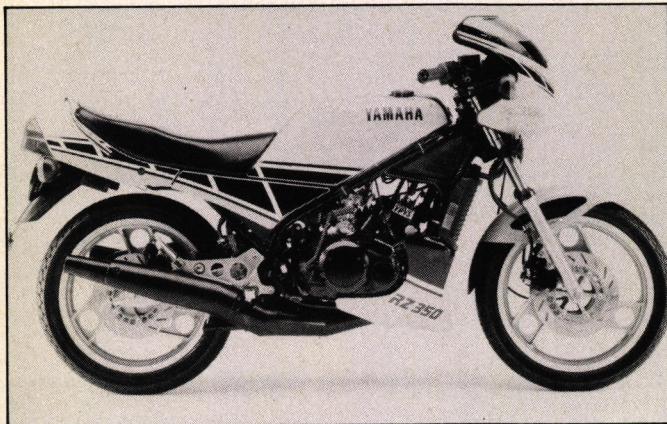
Yamaha is heart-attack serious about grabbing the three-quarter liter sportbike crown

A liquid-cooled, 20-valve motor makes the FZ750 a formidable contender.

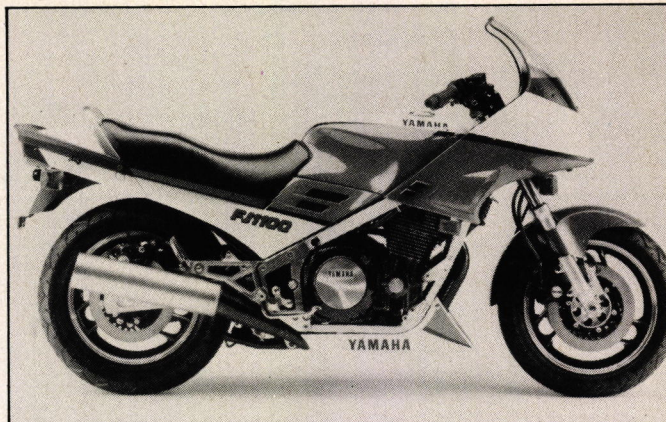
ries) racing rubber. Unfortunately, a numberplate is the only thing you can put on an FZ in California; the FZ750 is a 49-state bike. After designing in all this performance, Yamaha chose not to cork it up to meet California's strict emissions requirements.

• Speaking of finesse bikes, California riders will get a chance at one of the all-time greats this year: the liquid-cooled RZ350 two-stroke. By changing the material of one of the catalytic converters, and moving them up into the header pipes, Yamaha has reduced the RZ's

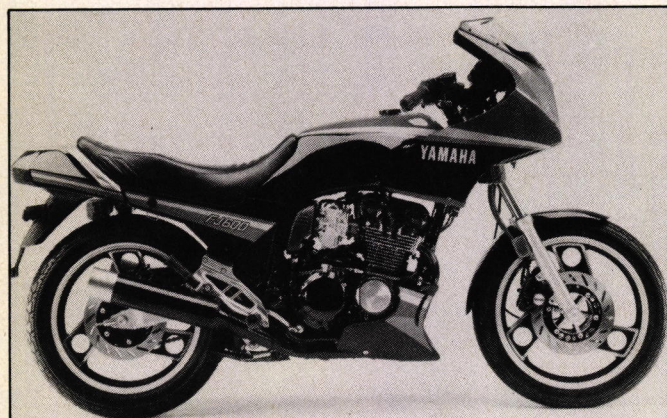
Continued



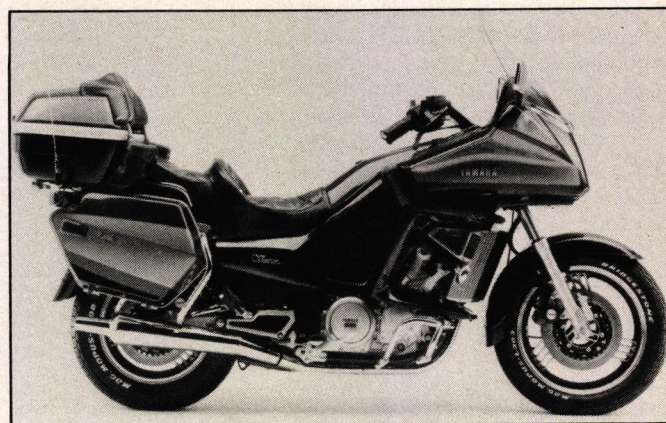
California street riders can now sample Yamaha's two-stroke magic
The RZ350's new pipes make it Golden State clean.



Yamaha's FJ1100 was the class of 1984's hyperbike class
With a host of refinements for 1985.



Last year's quickest middleweight comes with a new paint job for '85
The FJ600 also has an air-fork and a fatter rear tire.



'85 Venture Royale has all the things most serious touring riders want
This version comes with a big list of small changes.

emissions to a level that meets even California's stringent standards. Yamaha says the bike hasn't lost any of its peak-rpm power because of the change, either. But it has gained a new look: Revised graphics adorn the RZ's bodywork this year, and for '85 the red-and-white version gets King Kenny's signature on its fairing, as well.

- Another red-and-white Yamaha is a little brighter for '85, too. The highly acclaimed FJ1100 got a new coat of paint to sharpen up its looks; it's red and white this year instead of silver and red. Apart from that, only a short list of minor refinements separate the '85 FJ1100 from the '84 original. Internal changes include a revised shift drum, new carburetor slides to improve both throttle response and cold starting, and 0.5mm more piston-pin offset to reduce noise. Other changes for the '85 FJ include an upgraded anti-dive system and a non-slip material for the seat covering. When you already have a winner, as Yamaha did with the FJ1100, you don't change it just for the sake of change.
- That philosophy carried over to the FJ600 for '85, too. The most distinctive new-year change on this middleweight is its color: If you like black-and-red bikes, you'll love the FJ600, because that's its paint scheme for '85. And riders who bemoaned the lack of an air-fork on last year's 600 can rejoice; this time around the bike has one, along with a fatter, lower-

profile 120/80-18 rear tire. Not many changes, just refinements for what was the quickest bike at the dragstrip in the sporting-middleweight class of '84.

- Refinement is the name of the game for the Venture Royale, too. Once a touring machine has proven itself in the American market, as the Venture has, owners don't want to see sweeping changes in each new edition; little more than detail improvements are welcome. That's one fact of American touring that Yamaha has heeded well; the '85 Venture Royale, the only Venture model now offered, is much the same as it was in '84—with a few refinements. Yamaha claims the tail trunk's capacity has been increased by 40 percent for its '85 turn-key tourer, and the trunk has been relocated to provide more room for the passenger. In addition, removable pouches clipped onto the fairing and trunk increase small-item storage space, and the stereo system has been upgraded. Topping off the new Royale is a two-tone brown/gold paint job. Small changes to a big bike, but that's exactly what American tourers want. And it's what Yamaha gave them.

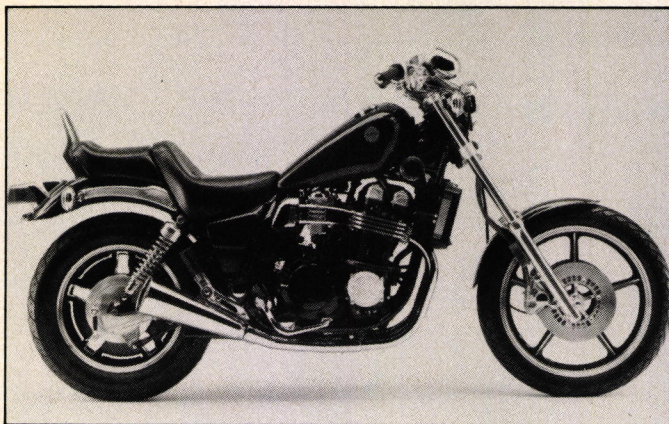
- Bikes like the V-MAX and the FZ750 might steal the headlines, but you shouldn't overlook Yamaha's Maxims; this year those everyday cruisers are anything but mundane. For 1985, though, Yamaha has two 700cc Maxims, both in sport-custom trim. The familiar

air-cooled version returns in downsized form to sneak in under the 700cc cutoff for the ITC tariff, but it's also got a new, liquid-cooled high-performance stablemate in the Maxim X. Both bikes have longer, more-raked forks than did the old Maxim 750, new dual-disc front brakes, two-piece seats, chopped rear fenders and plenty of chrome. And while the air-cooled version is meant for the price shopper, the Maxim X is the top-shelf model. This bike not only has liquid-cooling, it has the FZ750's five-valve head, too. Plus, the chassis features damping-adjustable shocks, an air fork and a disc-type aluminum rear rim. You pay a little more, you get a little more.

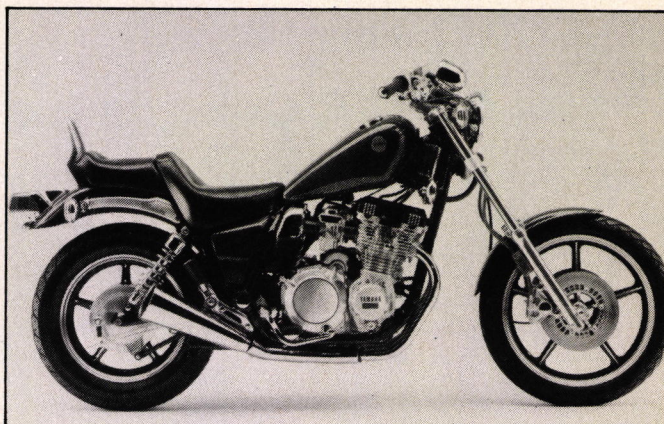
- If it's a vee-twin cruiser you want, though, Yamaha still has two to choose from: the XV700 or the liter-size 1000. Both bikes have a cleaner look this year, with two-tone black/blue colors and small, circular badges on their tanks. Loose-cushion-style two-piece seats and large, barrel-shaped shock springs add to the classic-American look.

FEDERAL CASES

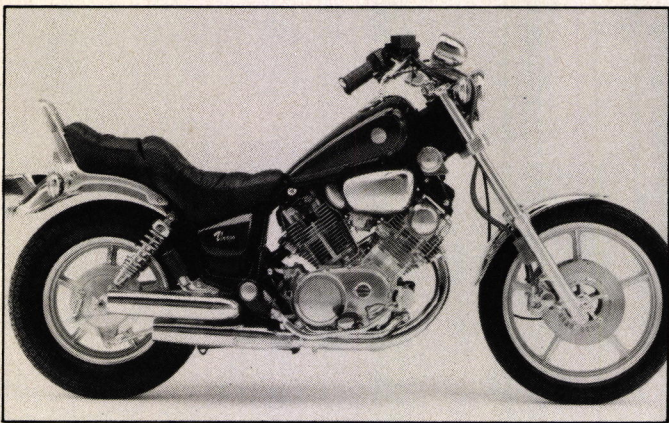
- The AMA is on the case. In the September 1984 issue, we reported the association's decisions both to oppose the 55-mph national speed limit actively, and to join forces with



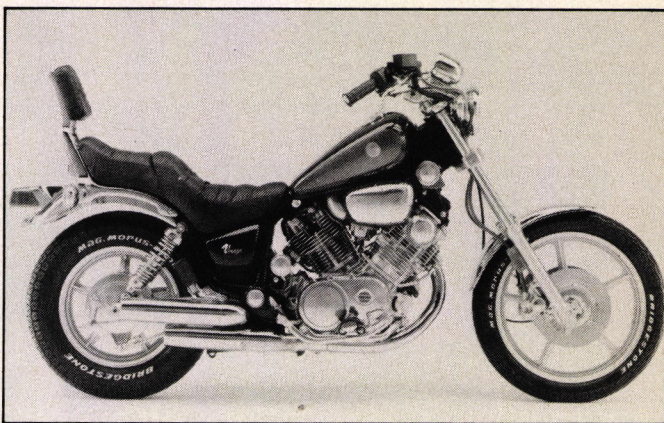
The Maxim X offers a dose of performance to go with its cruiser look
Courtesy of liquid-cooling and a 20-valve cylinder head.



Yamaha offers two versions of the sport-custom 700 Maxim for 1985
The air-cooled model is for the budget-conscious rider.



Last year this bike was one of Yamaha's best sellers
So it's no wonder that the 700 Virago is back.



Both vee-twin Viragos have a clean, less-cluttered look for '85
With more chrome and new two-tone paint jobs.

groups already in the fight, such as the Citizen's Coalition for Rational Traffic Laws (CCRTL). Now the AMA has mapped out its battle plan, and has announced a six-point program it hopes will convince Congress that "Speed Law is State Law."

Included in the arsenal are a series of public service messages for magazines and newspapers; a 55-mph Information Kit, with facts and figures on highway safety and fuel consumption; and a "55 Buster" logo to attract public attention. AMA officials say they'll also be contacting members of Congress directly, granting campaign help only to those lawmakers who favor a repeal of the 55-mph limit. But Bob Rasor, AMA Vice President for Government Relations, was quick to point out that for any real hope of success, the association will have to get its rank-and-file members into the trenches; the seven-member Government Relations Department can reach only so far. Rasor says all motorcyclists will have to get involved and spread the word, and not just inside the two-wheel community, either. He believes this is an issue that goes beyond motorcycling, and could help align motorcyclists with the general public. The AMA can provide the basic ammunition: The 55-mph Information Kit is available free by writing GRD 55, AMA, P.O. Box 141, Westerville, Ohio 43081. From that point on it's mostly up to you.

- After three years of prodding, the National

Highway Traffic Safety Administration (NHTSA) has proposed a ruling to allow the use of headlight modulators on motorcycles. Pulsing headlights, according to the Highway Safety Research Institute, are one of the best ways to make a motorcycle more conspicuous in daytime traffic. The proposed NHTSA ruling would allow the use of modulators with a pulse rate of 200-to-280 flashes per minute, provided the circuitry also included a light sensor to cut out the modulator during nighttime riding, and a fail-safe circuit so the headlamp would burn normally if the modulator failed. Harley-Davidson filed the original petition to NHTSA for headlight modulators in 1981.

- In the final months before the election, the Reagan administration put its fence-mending operations into full swing. Environmentalists were one group especially targeted for appeasement, because earlier they had accused the administration of selling off America's wilderness to the highest bidder. But Reagan's show of good faith to conservationists is turning into bad news for off-road riders across the country; Reagan signed seven wilderness bills into law, in the process eliminating many National Forest riding areas. Off-roaders in Washington, Oregon, Wisconsin, New Hampshire, North Carolina, Vermont and Missouri have had significant sections of their forest riding areas removed from "multiple use" designation. California could well be the

next addition to that list. House Bill 1437, which sets aside an additional 1.8 million acres of forest land in that state as wilderness area, awaits only presidential approval.

- Illinois riders can breathe a little easier now; motorcycles have been exempted from the state's vehicle emissions inspection law, set to take effect in the Chicago and East St. Louis areas in January 1986. That exemption for motorcycles wasn't the only legislative success Illinois riders enjoyed during 1984, either. House Bill 2571, an amendment to the state's vehicle code establishing a mandatory helmet law, was defeated, as well.

- But while Illinois might not have a mandatory helmet law now, it does have a stringent rider-testing program. A recent move by the Illinois secretary of state has included the Motorcycle Safety Foundation's Motorcycle Operator Skill Test (MOST), and the Alternate Motorcycle Operator Skill Test (AL-MOST), as part of the state's motorcycle-licensing procedure.

HARD CASH

- With most of the news from the motorcycle industry focused on 1985 and new-model introductions, one segment of the business remains concerned with '84. The scorekeepers are still at work on last year's books, deter-

Continued

SHOW TIME:**1984 IFMA Cologne Exposition***Sportbike spectacular.*

• Our European-sportbike issue last September, while tantalizing to American riders, was only part of a much larger story. To get the full impact of the sheer variety of sporting motorcycles available outside the U.S., you really had to be at the 1984 IFMA Expo, held in Cologne, West Germany. Because while American riders have just gotten a taste of serious sportbikes, European enthusiasts have ridden almost nothing else for decades. And Cologne '84 was a real celebration of the sportbike.

Some of the most outstanding examples shown were Suzuki's RG500 Gamma streetbike and oil-cooled GSX-R750 four-stroke, Honda's NS400R Freddie Spencer replica and single-cylinder XBR500S, to name just a few. Plus, the Continental contingent included the very best and latest from Bimota, Laverda, Moto Guzzi, Cagiva and BMW. Even Horex had a serious Rotax-powered sportbike at Cologne. Nor are European sportriders immune to the appeal of Milwaukee's vee-twin, either—Hans Muth's latest work with a Harley-Davidson Sportster proved that.

True, the majority of bikes shown at Cologne won't be offered in America—not yet, anyway. But it might not be too long before they are, because sportbike America is coming of age, and quickly.

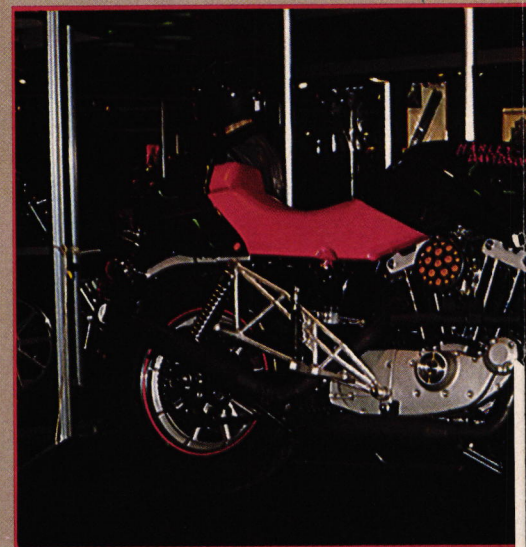
—Joe Kress



1



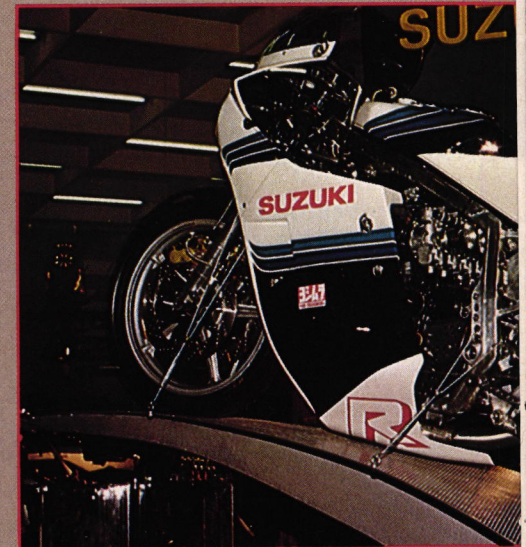
3



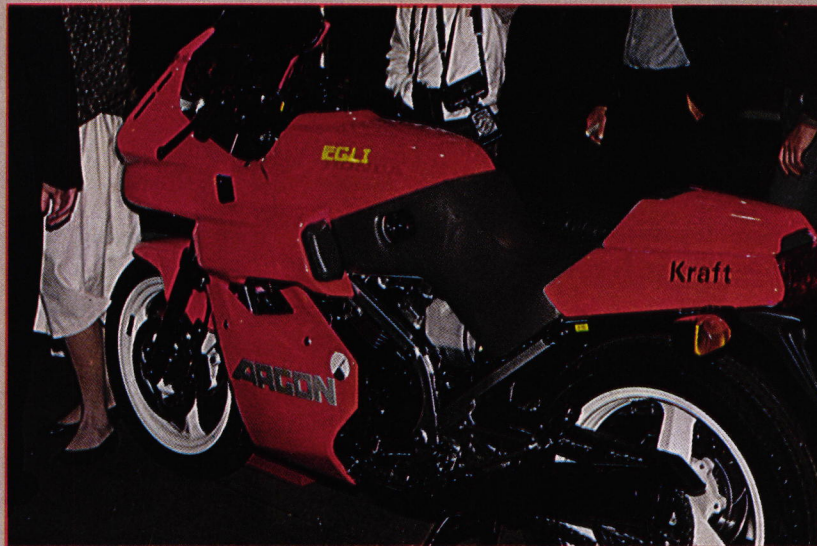
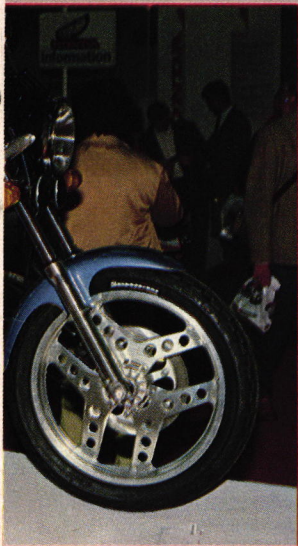
4



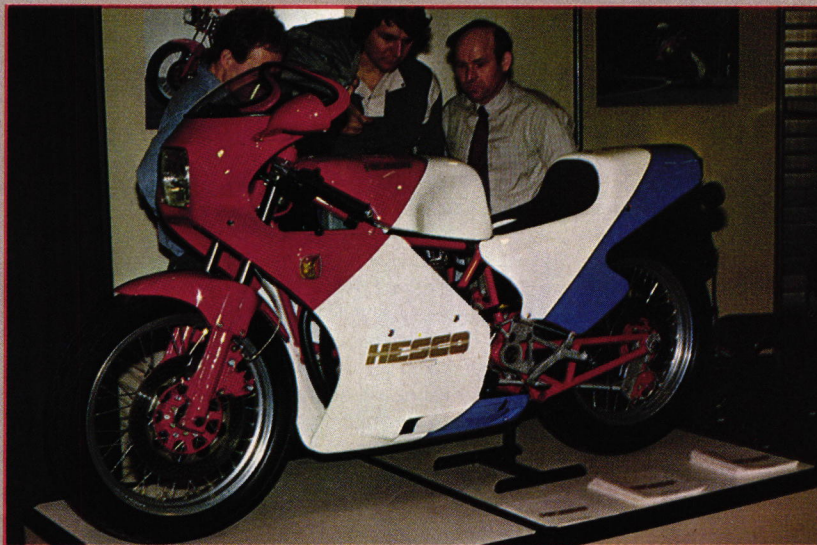
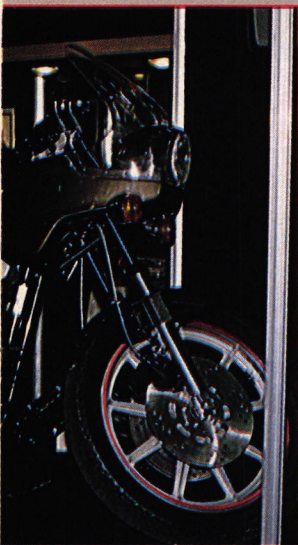
6



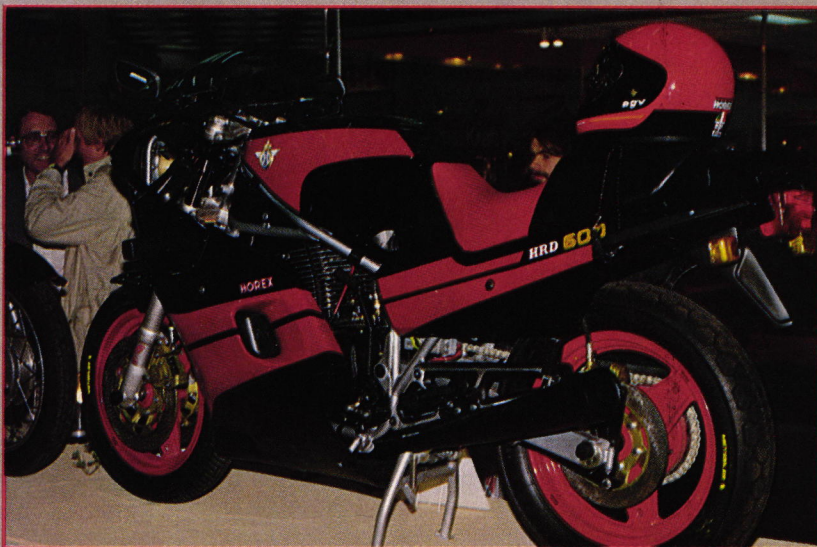
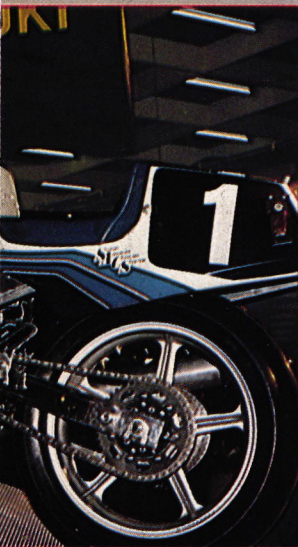
7



2



5



8

1/ One new Honda takes its cue from an older, simpler style of motorcycling. The XBR500S single, with a four-valve head, CDI ignition and electric start, is no reborn relic, though.

2/ Fritz Egli doesn't always build a new sport machine around one of his own frames. When he has a solid-handling Honda vee-four to start with, some new bodywork will do the trick.

3/ Suzuki has just the ticket for riders who won't settle for anything less than a 500cc two-stroke vee-four. The RG500 Gamma comes with a spec sheet that's almost a carbon copy of a GP bike's.

4/ The Hans Muth prototype Harley Sportster was one exhibit no one missed. This one-of-a-kind, show-only machine was brought in to test the commercial waters. Interested?

5/ Cologne '84 was proof positive that not all sportbikes are made in Japan; there were plenty of specialty manufacturers around to show their wares. The Hesco/Rotax 500 Sport was one perfect example.

6/ Honda also offered the Freddie Spencer replica. With 72 claimed horsepower in its 90-degree vee-three, the NS400R Honda would seem to be a sure-fire street-screamer with all the right stuff.

7/ Suzuki claims 100 horsepower for its street-going GSX-R750. But if that's not enough, the firm has even more to offer: This GSX-R750 racer comes factory-kitted for 130-plus horsepower.

8/ Last year we told of Horex's return to the midsize-streetbike market. If the HRD600 is any indication of things to come, it's a good sign. This new sport machine is powered by a 50-horsepower Rotax.

Continued

mining each company's position in the U.S. market. According to the latest figures for new-bike registrations through June '84, Honda is head and shoulders above the rest, with nationwide registrations totaling 247,463. That gives Honda a commanding 56.1 percent of the U.S. two-wheel market. Yamaha places a distant second with 19.1 percent, Suzuki is third with 10.3 percent, Kawasaki comes in fourth with 9.4 percent, and Harley-Davidson ranks fifth with 3.9 percent. BMW's six-month registration total of 2115 puts it in sixth place with 0.48 percent of the U.S. market.

- Those figures put BMW just a little behind the company's initial U.S. sales projection of 5000 units for '84. But a recent move by BMW North America could pick up the pace. The German-bike importer, along with the General Electric Credit Corporation, now offers financing to its retail customers, along with a complete leasing program. The \$400 million joint venture, which began operation in November at all 248 BMW dealerships, reportedly is the first partnership of its kind between a vehicle importer and a financial-service company. Last year, Yamaha signed a similar agreement with Ford Motor Credit Company to provide retail financing, though that deal apparently involved no corporate investment.

- Cagiva North America seems off to a somewhat rocky start: The company just announced an all-new management team. Gianfranco Castiglioni, one of the directors of Cagiva Spa., in Italy, is now the president of Cagiva North America. He replaces Attilio Sandroni, who has left Cagiva. Castiglioni immediately appointed a new vice president and a new general manager for the American operation, too. Cagiva's problems aren't limited just to this country, though. Despite a reported contract giving Cagiva the full output of Ducati VM (Ducati's engine-manufacturing arm), Ducati continues to build and sell complete motorcycles.

- Bimota is feeling the pinch, too. It's hardly a secret that sales of \$10,000-plus sportbikes has slowed considerably for that Italian specialty manufacturer. Now, in a move hoped to raise much-needed cash, Bimota has offered its chassis-design expertise to other European bike manufacturers, including Cagiva.

- California's off-road riders, despite losing some territory to newly designated wilderness areas, haven't come out on the short end of the stick completely. The state's Off-Highway Motor Vehicle Recreation Commission recently approved \$7.2 million worth of grants and agreements to establish new riding areas and to improve existing off-road facilities throughout that state.

RUMORS

- On the Superbike—or superstreet 750—front, Yamaha's FZ750 is poised to take a shot at Honda's Interceptor. So where's the new Interceptor to thwart this attack? Is Honda just resting on its laurels? Don't bet on

it for a minute. Sources among race promoters say Honda's already got a new bike ready to go just waiting in the wings, and they're calling it the Interceptor Mk II.

- We hear Yamaha might not be quite finished with its new FZ750 pure-sport machine, though. Features like the FZ's offset drive chain, which allows room for 150-series racing rubber, could be just the tip of the iceberg. Inside sources say work already is underway on a race-kitted version of the bike, which will have more power, a dry clutch, lighter wheels with factory-mounted race tires, and even a numberplate. Our informants say this ferocious FZ will be a race-ready Superbike weapon destined to make repeated appearances in winner's circles.

- Yamaha's production-racing FZ just might have some company, too. This time the chatter comes from across the Atlantic and concerns vee-four two-strokes. Remember Kawasaki's Eddie Lawson Replica racebike? Well, there could be another ELR, only this time it would be yellow. European sources say Yamaha is on the verge of introducing a production racer based on Lawson's World Championship-winning vee-four. It would be available in very limited numbers only to qualified (read: competitive) buyers.

- Apparently, though, Kawasaki has its work cut out for it in trying to develop a new Superbike contender. More inside-racing sources say the firm's liquid-cooled, 16-valve, three-quarter-liter Ninja just doesn't perform nearly as well as Kawasaki had hoped. They also warn not to be too quick in counting the company out. Kawasaki, they caution, has a history of solving performance problems, usually with winning results. We'll stay tuned.

- There's another Kawasaki sportbike we've heard talk of, too. Remember the 454 LTD Half-a-Ninja cruiser we showed you in "Preview '85" last month? Well, our Kawasaki informants tell us there's another version of that high-horsepower, belt-driven Twin about ready to roll: a 350-pound mini-roadrocket that would qualify as the *real* Half-a-Ninja, looks included.

APART FROM THE CROWD

- Hot heads of the world rejoice. Help might be right around the corner, in the form of an air-conditioned helmet. It won't be cheap, though; the asking price is going to be \$450. Sound a little steep? Well, you'll get no argument there, but consider that the solid-state a/c system used in this experimental super-comfort helmet adds only 11 ounces to the hat's weight. Indy racer Tom Sneva already has his. And you don't want to be left out in the cold, do you? Or is that out in the heat?

- Add one more to that cool-lid category: Bell Helmets, we hear, also has been trying to lower in-helmet temperatures. But Bell's solution, aimed at the car-racing crowd, is a liquid-cooled model. No word on exactly where the

radiator mounts, though.

- It's contest time again: Harley-Davidson has started the search for its new "Ms. Harley." This year, the winner will have to do more than just powder her nose and look pretty, though; she'll have to be able to ride a bike, as well. The winner, to be picked during the festivities at Daytona Cycle Week, must be a licensed rider, or promise to become one within two months of winning. Obviously, H-D doesn't want someone disqualified just because she can't ride.

- Try to imagine a European dream-ride and you might come up with something like this: two weeks to explore the Continent on a BMW K100, starting in Germany, the home of the Autobahn. Add to that scenario a trip to the International Bicycle and Motorcycle Exhibition in Cologne, Germany, and you have the makings of a Sport-Tour Ride of a Lifetime; Continental Tires' Sport-Tour Ride of a Lifetime Sweepstakes, to be exact. And Lee Rowley of Madison, Wisconsin, was the lucky winner, accompanied by his guest James Cheek. In addition, Rowley and Cheek got a tour of Continental's factory in Korbach, Germany, and their itinerary included Austria, Switzerland and Holland. Happy trails, gentlemen.

- Suzuki's name-pickers have done it again. Two years ago, as you might recall, the company christened its 550cc cruiserbike the Impulse, only to find out that Isuzu already had a trademark on the name. Now, for '85, Suzuki had plans to refer to its factory customs as Low Riders. And we all know which Milwaukee manufacturer holds a trademark on *that* name, and has since 1977.



As we live and breathe, it's the Michelin Man

"How about a little privacy, huh?"

- The Michelin Man's been uncovered, the truth finally can be told. All these years you've probably been living with the illusion of that pneumatic pudge-ball as a larger-than-life figure, floating above the cares of day-to-day living. Well, that illusion is now shattered, because the Michelin Man is indeed human. And he puts on his pants the same way we all do—one balloon at a time.



ILLUSTRATION © 1985 MARK WAGNER

PROFILE:

Jean-Pierre Bailby

Reinventing BMW for America.

BY MICHAEL JORDAN

No matter what anyone says about the German firm's 60 years of tradition, BMW is a brand new motorcycle company as far as this country is concerned. Since taking on the moribund U.S. distributorship in 1980, BMW North America has virtually reinvented the marque, making it far more influential in this market than its modest sales would otherwise suggest. And now the introduction of the K100 gives BMW North America new machinery to complement that new spirit.

Ironically, BMW speaks to America

with a French accent. The primary spokesman for BMW is Jean-Pierre Bailby, who assumed his role as vice-president of operations after helping to make France the most important export market in Europe for BMW. Bailby came by his interest in motorcycles when he was an engineering student working as a mechanic for classmate Jean-Pierre Beltoise, then a roadracer and later to become a Formula 1 car racer. After some success as an amateur car racer, Bailby joined Honda France, where he rose to become nationwide service manager for

both automobiles and motorcycles. He joined BMW France in a similar role in 1970 and initiated BMW's successful involvement with the Paris-to-Dakar race.

During his tenure with BMW North America, Bailby has earned a great deal of respect for his skill in the saddle. On a four-day ride through the Alps that BMW arranged for U.S. journalists at the European introduction of the K100, Bailby always seemed to be sipping Perrier in some cafe, waiting for the hotshot writers to catch up. But more importantly, Bailby's shrewd sense of BMW's

Continued

position in the motorcycle business has also earned him respect. And as the following interview reveals, Bailby expects BMW to be a leader in the U.S. market, not just a participant.

• *What is it that makes a BMW different from other bikes?*

"Well, it is a hand-built motorcycle. By that I mean it is built only in limited quantity, and exclusivity means a lot to our customer. It is not the kind of motorcycle you see every day. Also there is the image of durability. Our motorcycle has also an overall impression of quality that is most important. Our customer is older, more experienced, more sophisticated, and the quality of the machine and of the riding is very important."

• *Where does the K-bike fit in the market and how does it reflect the BMW mystique?*

"The K100 allows us to be more competitive with the Japanese in performance. It is very fast, has good handling, good stability. But it still has a good balance of performance, like the R-series. We think even a very good rider cannot use 120 horsepower on the road, even in Europe where the speed limit is much higher. To ride in the Alps you learn that it is more important to keep a good pace than to have only speed. You must have good balance, easy handling, riding comfort, even fuel economy. The K100 has all these things. So it is the same as the R100, only at a higher level with the competition."

• *Does the discontinuation of the R100 affect BMW's image?*

"After the K100 was introduced in Europe, R100 sales declined while overall sales went up. So we think there is not a problem. We think the BMW image is not only the Boxer engine. But for riders who still prefer the feeling of the Boxer, there is still the R80."

• *What has BMW done to be a more powerful force in the American market?*

"When BMW N.A. took over in 1980, there were three phases to our plan. The first phase was to make our dealers stronger. I think service to the motorcycle is even more important. So we tried to make sure our dealers were good businessmen. Also we made our image much stronger with advertising, for the confidence of our dealers and customers."

"The second phase was to show that BMW could create new products. And with the K100 we have done that."



"Many people in our business do not understand it, but with BMW, the motorcycle is a kind of philosophy; it is not just a product."

"The third phase is to be the leader in our business. We will introduce more products, but more important is to be a leader in business; more professional, more sophisticated. Already you have seen some of this: the lease program, the European delivery program, and now the three-year warranty. This is the kind of leadership BMW must show."

"So far we have been successful, because our sales have doubled in the last four years."

• *Even so, the volume of BMW sales worldwide is very small. Why is BMW in the motorcycle business at all? Can it really compete with the Japanese?*

"Many people in our business do not understand it, but with BMW, the motorcycle is a kind of philosophy; it is not just a product. It is how our business began, even though our main business now is automobiles. We like motorcycles very much, which is why we want to make BMW more than a manufacturer, and keep the rider a part of BMW even after he buys the motorcycle. Also, BMW as a company is thought of differently because it makes motorcycles. The bikes are dynamic, trend-setting, and high-performance, and the image makes BMW stronger."

"Also, we do not compete with the Japanese directly. We build motorcycles only for our special market. We even think that the new sportbikes are making customers for us."

• *What effect has the ruling of the International Trade Commission regarding the pricing of Japanese bikes had on BMW?*

"No effect at all on BMW. Personally, I think the ruling of the ITC has had no effect at all, because there are so many older Japanese bikes in warehouses. Also, our market would not be affected anyway."

• *What impact did considerations for the U.S. market have on the design of the K100?*

"They asked us about everything. America is BMW's largest export market, so of course we would be asked. But if you ask if there is anything different about the U.S. K100, then no, there is not. It is the same as in Europe. Only safety and emissions things are different."

• *Are there plans to race the K100?*

"Racing is good for BMW's image. It is youthful, dynamic and projects high performance. That is why we race in the Baja. But right now we have no plans for the K100."

• *Which BMW is your favorite?*

"Unfortunately I live in New Jersey, so I can ride only from May to October. But I also ride with dealers and sometimes even with journalists. Usually I ride an R/T. The riding position and fairing are more comfortable, and there is more leverage with the handlebars. But for looks, with the new K-series, I prefer the RS, of course."



PHOTOGRAPHY © 1985 STAN STREMBICKI

RIDING IMPRESSION:

KZ1300/EML Sport Sidecar

It's not like the others.

BY JIM MILLER

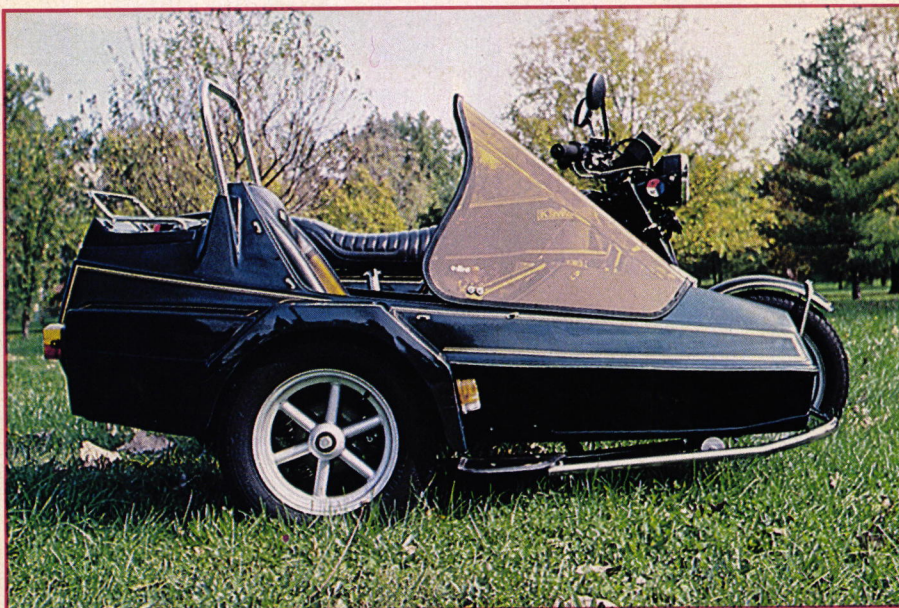
In the great chain of moto-zoology, sidecars are neither fish nor fowl. According to die-hard solo riders, sidehacks lack the handling characteristics and kinesthetics of motorcycles, yet haven't the carrying capacity or weather-protection of cars. Sidecars, that thinking goes, are quirky, antiquated devices, throwbacks to the days when a hack was considered a cheap alternative to an automobile—a kind of evolutionary missing link

whose time has come and gone.

That attitude, unfortunately, is partly due to the fact that many sidecars aren't much different from what they were 30 years ago: a frame, wheel and car bolted to an otherwise-standard two-wheeler. But converting a motorcycle from a horizon-tilting single-track vehicle to a dual-track, three-wheeled rig involves more than adding an outrigger and wheel. And it's that understanding that's led EML, a Dutch sidecar manufacturer, to develop a line of sidecars that treat the car as something more than a bolt-on training wheel.

A large part of each EML kit is devoted to modifying the motorcycle for sidecar

Continued



EML Sport's 12-inch wheel and radial tires separate it from other sidehacks

Bringing sidecar performance into the '80s.

use. Foremost among those changes is the substitution of an Earles-type fork with Koni 7610 shocks for the stock telescopes, which tend to bind under the side loads imposed by a sidecar's flat cornering attitude. The design of the Earles fork also provides an effective anti-dive: Even under hard braking, the KZ1300 rig we tested refused to nose down.

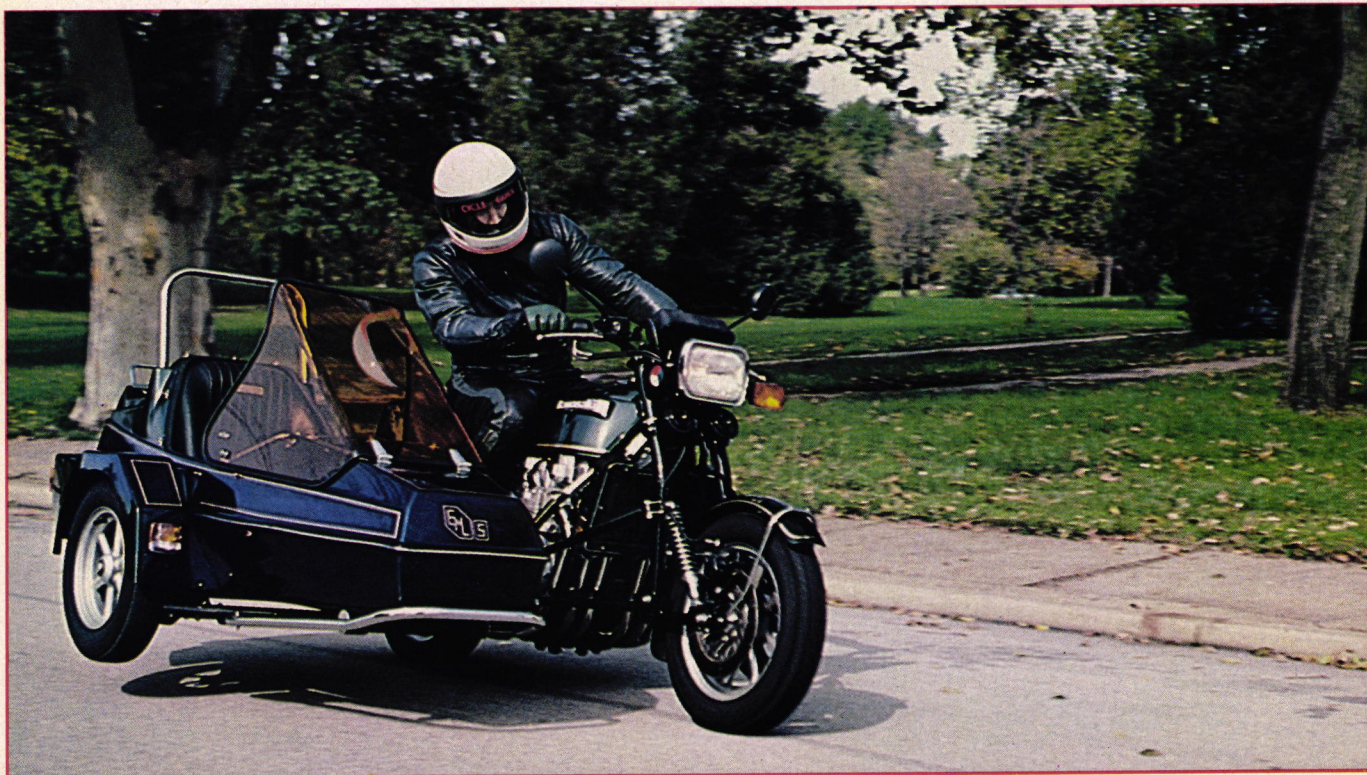
In addition to the Earles fork, another obvious change is the use of EML's own wheels, which are wider and smaller in diameter than stock. In the case of the

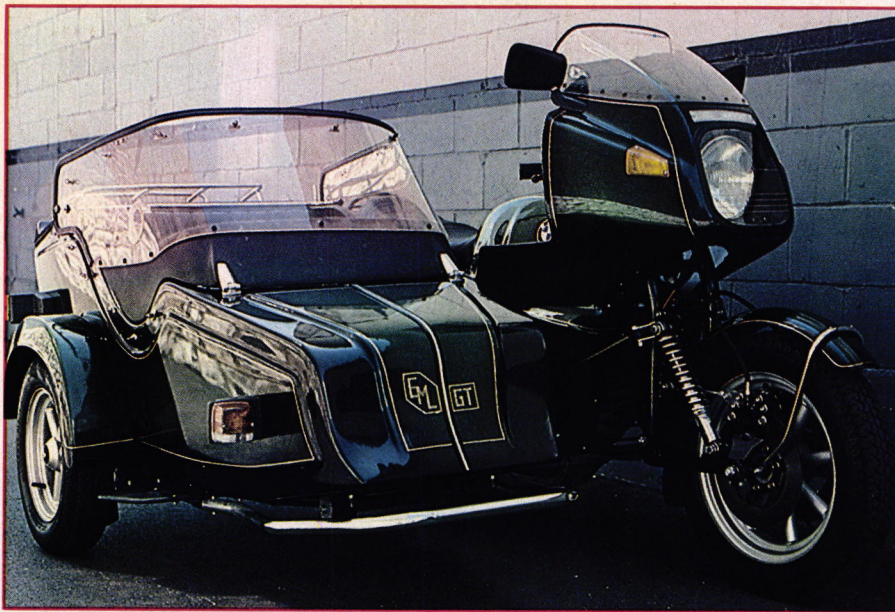
KZ, the stock 18-inch front and 17-inch rear wheels were replaced with 15-inch wheels front and rear, with a 12-inch wheel on the car itself. The fork and wheels change the appearance of the Kawasaki completely, giving it a squat, broad-shouldered kind of look that complements the KZ's squarish styling. But there's more to those wheels than styling: The reduction in diameter provides a lower center of gravity than is possible with the stock wheels, and effectively lowers the overall gearing of the bike to

compensate for the effect the additional weight has on acceleration.

Another equally important, though not so obvious, change is wrapped around those wheels, too: The EML is equipped with automotive-type radial tires. The benefits of radials over bias-ply tires—lower rolling resistance and longer wear—are well-known, but the cornering dynamics of a motorcycle make adapting radials to a bike more than a simple mount-'em-up affair. A sidehack, however, corners much like an automobile, and the simple fact that a sidecar rig doesn't lean through corners makes the use of radial tires not only possible but desirable. For example, EML's U.S. importer, Sidecar Restorations (BMW Motorrad of St. Louis, 4011 Forest Park Blvd., St. Louis, Missouri 63108) notes that while conventional sidecars often get as little as 1200 miles from a set of tires, the stock radial tires on an EML can last as long as 30,000 miles.

But the payoff for the EML is much more than longer tire wear. The KZ1300 rig displays few of the characteristics normally associated with conventional sidecars: There's little twitchiness during power-on/power-off transitions. Only when the throttle is snapped open or closed will the rig twitch right or left; working the throttle gently produces almost no sideways movement. Likewise, the KZ shows no tendency to pull right or left during straight-line running; in fact, the bike displays an almost eerie lack of





BMWs are popular bikes for EML's sidecar treatment

Family-style Grand Touring is spelled EML GT R100RS.

on-center feel, which was slightly disconcerting during the first 100 miles or so.

That lack of feel disappears during cornering, though. By two-wheeler standards, the EML's steering is distinctly high-effort, and eye-blink quick. Getting accustomed to the steering on the EML involves a workout, accented by a smattering of scalped apexes and bashed curbs, until you realize that the rig goes *exactly* where you point it—*right now*. But once you've adjusted to the quickness, stringing together a set of corners is simply a matter of shoving the handlebar in the appropriate direction (there's no countersteer involved, of course), and rolling on through. In corners, the KZ/EML rig gives plenty of feedback through its short handlebar, and with no fear of scraping chassis parts, mid-corner corrections involve nothing more than dialing in more or less steering lock.

There is one solo-riding technique that does translate to sidecarring, however: hanging off. Body English helps distribute the weight equally during corners, and helps keep the third wheel solidly planted on terra firma during fast right-handers. On left-handers, however, the possibility of lifting the chair disappears, so the EML can blitz through lefts like a three-wheeled Ferrari. The suspension is about what you'd expect from a Ferrari, too: well-controlled, compliant—and stiff. With the car empty, the EML pitches slightly side to side, and rough pavement produces some jarring from the third wheel. Reducing the spring preload and dialing up the rebound damping on the sidecar's Koni shock reduced the

pitching considerably, but the best fix is to find a partner. The added weight of a passenger smooths out the ride considerably, and lessens the chance of lifting the sidecar.

Even if that wheel *does* come up, it does so with little drama, and no trace of chassis- or wheel-flex. Sidecar Restorations claims chassis rigidity is one of the major advantages of the EML over conventional sidecar rigs. The EML chassis uses large-diameter 4130 chromoly tubing, and bolts to the bike's frame at four

widely spaced points, two on the lower frame rail, one on the front downtube, and the fourth just below the seat. The two upper mounts provide the camber adjustment for the third wheel via two threaded links, while the toe-in adjusts via slotted mounts at the trailing arm on the sidecar frame. Wheelbase and trail on the EML also are adjustable, by placing the fork's swingarm pivot in either of two positions, which are approximately 0.87-inch apart; in its rearmost position, the fork increases the stock wheelbase about 2 inches, and reduces the trail by almost 2.5 inches. Moving the pivot decreases the wheelbase and increases trail, which quickens the steering.

In addition to the fork, wheels, frame and the car itself, the kits include a Boge steering damper, Koni shocks and mounting hardware to adapt the bike's front disc brakes to the EML fork. The sidecar itself uses a small disc brake with EML's own caliper, and the kit includes the hydraulic parts necessary to link the sidecar brake to the rear brake of the bike. As you might imagine, that much hardware adds to the bike's weight—about 240 pounds—and doesn't come cheaply: EML sidecars range in price from \$4838 to \$5490, depending on the bike and model of sidecar (paint and installation extra). That price range also includes a choice of four sidecar styles: Touring, Sport, Sport Tour and Family Tour GT, a two-passenger model.

Regardless of the style, the sidecars themselves are plush and comfy. The two-passenger GT is roomy enough for most third-world families, and the Sport model on the KZ1300 is comfortable for over-6-foot passengers. Once nestled into the black Corbeau seat, you can sit back and watch the world go by, oblivious to any wind or rain that might be making the pilot's life miserable. A slight amount of wind spills past the sides of the windshield at freeway speeds, but not enough to create excessive drafts or wind noise. In total, there are only two minor problems with the car: The folding windshield tends to rattle over bumps; and the trunk latch bends easily and binds up the lock. Those are minor problems, of course, but disappointing nonetheless.

But there's nothing disappointing about the performance of the EML: It's obvious the company has done its homework in bringing sidecars up to the '80s. The EML Sport is an excellent choice for a rider looking for something different—different from other sidecars, and certainly different from anything on two wheels.



Corbeau seat is plush and roomy

First-class passenger accommodations.

"TOGETHER, NOTHING ON THE ROAD CAN TOUCH US."

I expected the GS1150 to be fast. I read all the magazines, heard all the talk.

I knew the 16-valve TSCC engine was turning in awesome numbers. But I really didn't know this bike until I rode it.

That's when I realized that this bike could take me places the numbers couldn't measure. Where the adrenalin starts pumping and the world feels like it's standing still.

And I knew that what set my 1150 apart was performance. The way it leans into a tight corner. The firm anti-dive response. The easy way it rides, with an even broader powerband that gives me more control.

The way it handles, that's something I could feel right from the start. When I ride my Suzuki, we work together like a single moving part.

1985 GS1150 E/ES: Four-stroke, 16-valve DOHC 4-cylinder engine with Twin Swirl Combustion chambers (TSCC). "Full Floater" rear suspension with remote hydraulic preload adjustment/damping adjustment. "Posi-Damp" forks with anti-dive. Triple disc brakes. 12 month unlimited mileage warranty. See "Limited Warranty" brochure for details.

THE 1985 SUZUKI GS1150 E/ES.



WORKS LIKE A SINGLE MOVING PART.



SEATTLE



TRANSAMERICA MARATHON:

They Shoot Harleys,

Riding The 10-Day, 8400-Mile Ironbutt Rally On A Harley

BY DAVID MALLET



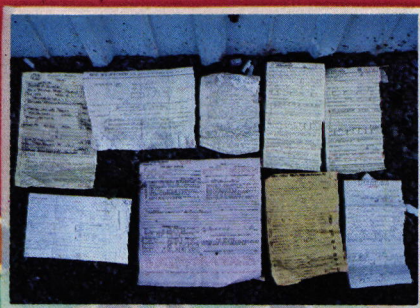
By the time the plane lands in Philadelphia, my mind is mush. Two days before the starting flag drops, I can't understand how Editor Works conned me into racing around the four corners of the U.S.A. in ten days, competing with nine other berserk riders for some dubious honor. The other staffers at CYCLE GUIDE have wagered that I'll endure only two to seven days aboard the unfaired Harley-Davidson Softail. With divine intervention, I might finish while the Ironbutt winner is still buying steaks and champagne at the victory brawl. But smart money says I'll ditch the Softail and catch a Greyhound home. Helluva way to get a story. Yet the day before the start, as I ride through pastoral Pennsylvania, I find I'm hooked on the chopperesque Harley from the first mile. The Hawg will make it: It's *me* I'm worried about.

Ironbutt figures to be a blend of Paris-to-Dakar, Macho Man and marathon dancing. The road rally is billed as "The World's Toughest Motorcycle Competition," and it's built out of 10 motorcycles, 10 riders, 10 days, 8000-plus miles. The riders will try to zero five checkpoints after leaving the Montgomeryville, Pennsylvania, start/finish line: Boston in one day; Seattle in three more; then San Diego in two; Daytona in three; and back to the start in a final bone-crushing, 1100-mile sprint. To forestall ties, promoter Mike Rose added out-of-the-way bonus-point towns (such as Cody, Wyoming) for those daring souls with the right stuff—and feeble brains. As a limit on flat-out running, points are deducted for tire changes. And the best part: the tantalizing prospect of \$40,000 in prize money, along with instant fame. Or so it seems.

ILLUSTRATION © 1985 MARK WAGNER

SAN
DIEGO





Don't They?

-Davidson Softail.

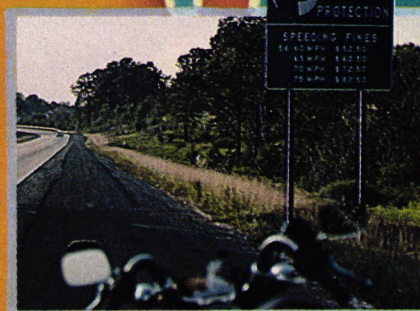
MONTGOMERY
-VILLE

But when I arrive in Montgomeryville, my notions of high-class accoutrements disappear. Where are the cheering thousands? The network television cameras? The lavish accommodations and motorcycle groupies? But no-o-o, the official Ironbutt hostelry is Cockroach Motel. While I wait for other riders to arrive, it's a desperate struggle between the insects and me to see who gets possession of the saggy bed. It's beginning to look like Ironbutt isn't going to mean a quick trip to Hollywood and a Wheaties endorsement for the winner, after all. I'm beginning to understand that motorcycle rallies aren't accorded the same fanfare as auto rallies, and Ironbutt *is* the first genuine road-going, motorcycle-only marathon.

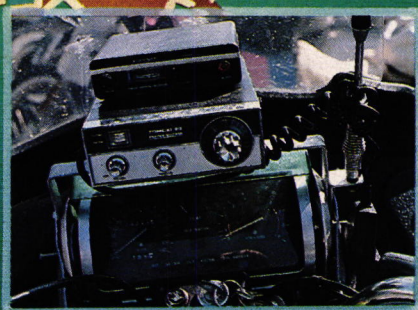
When the other riders straggle in, they congregate in my room, war stories giving way to business: The \$40,000 prize money suddenly has dwindled to the riders' own \$5000 pooled entry fees, plus "contingency" prizes. The riders also are concerned about power-riding from Montgomeryville to Boston to Seattle in 84 hours, via New York City during the noon rush hour. The riders are irritated, *really* irritated. With a couple of exceptions, these motorcyclists are unsponsored privateers. While the expected purse isn't everything, it's still *something*. There's serious grumbling—then unity and collective bargaining—and a riders' walkout two hours before the 9 a.m. start. But Gary Patterson, owner of Montgomeryville Cycle Center (where Ironbutt originates and ends), bails out the event by matching the entry fees. Ironbutt begins, minus the Boston leg. It's now *only* 3300 miles to Seattle in three days, three hours.

Continued

PHOTOGRAPHY © 1985 TOM RILES



DAYTONA
BEACH

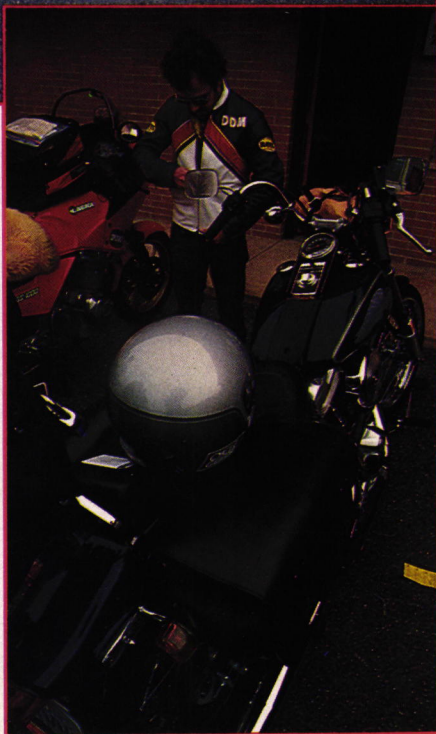


At the start: A riders' strike, no motorcycle groupies or network television. Author wonders about the sanity of it all. Swetland's sheepskin posterior pillow.



BUNNY RABBITS AND COYOTES

There are nothing but *serious* riders and motorcycles here: Roy Eastwood (Canada; 41 years old; BMW R100RS) claims to hold the TransCanadian record. George Swetland (California; 31; Laverda RGS1000), rides the Eurohunch triple, making him one of the Fast Guys. Jim Newberry (California; 37; Honda V65 Sabre) can bench press 300 pounds, and the Sabre can pull 135 mph all day long. Nice guy Kim Davis (California; 29; Yamaha Venture Royale) might lack the rattlesnake instinct necessary to survive, but the Venture looks capable of going to Mars and back. There's George Egloff (New Jersey; 43; 1975 Suzuki RE-5 Rotary), who has ridden from New York to San Francisco in 46 hours. His friend, Ed Thompson (New Jersey; 27; BMW R80G/S), hopes to tame American Interstates on the dual-



purpose Beemer. Chuck Aughinbaugh (Pennsylvania; 29; 1981 Gold Wing), has all the paraphernalia: sheepskin seat, radar detector, butt ointment, fairing. Maybe the most serious contender is former Alaskan dog-sledder Alan Pease (California; 35; BMW R80RT). But the subtlest member of this wild bunch is Richard ("Pharaoh") Sommers (Arizona; age unknown; 98 cubic-inch stroker Harley), who arrives with a straight-pipe roar and a flourish on the orange-and-black "Pawnee Warrior" café Harley. The multi-tattooed Sommers vows he'll win the Ironbutt on "All-American Balls."

In this crowd, the laid-back Softail and I look like bunny rabbits in a pack of coyotes. What *am* I doing here?

TRUCKING THROUGH THE HEARTLAND OF AMERICA

I'm flagged off by a cheering 50-person throng consisting of pit-crewing wives, sweethearts and CYCLE GUIDE's dubious photographer Tom Riles ("You guys are crazy, you know that?"). But my one moment of glory—being the first Ironbutt to set his wheels into motion—turns to ashes as I get lost within two minutes. I've craftily found a wrong-way shortcut. After hours of making great time going nowhere, the Softail and I intersect I-80 and motor west. About midnight, Newberry, Davis, Thompson and Eastwood zip by. At a gas stop, the hot topic is Pharaoh on the nuclear-meltdown Harley. Truckers are yammering on the CB about a motorcycle rocketing by them on the dirt divider at more than 100 mph. Newberry collects his second ticket when a state trooper isn't quick enough to radar the blurred Pharaoh; he zaps Newberry instead.

The gang leaves me behind when I stop to fiddle with a now-broken cassette player. Damn. I *had* depended on my stay-awake collection of tunes ranging from "Aida" to ZZ Top, with some instructional Beginner's Japanese thrown in. Now it's solo riding until 9 a.m., when I start to doze off in the heartland of America. Old man at the motel who smokes Chesterfield Kings ambles over to the Softail, and pronounces it to be a "Nice Amurrican bike."

Next morning, after four hours of sleep, I see Illinois blend into Iowa. The Softail's distinct character makes itself felt with every piston stroke. While other riders are blistering their butts and the Interstate, the Softail and I barely warm the asphalt. But this is Adventureland, with 8000 miles of America in front of the tiller. Though the Softail is going to tax every corpuscle of my body, and demand endless mental wattage, it will be worth it to sniff the unfoiled American scents of ripening corn, pungent pigs and diesel smog. I'm discovering that everyone connected with truck stops, at least, loves the Harley. And what could be better than ambling along with thoughts of Peter Fonda, New Orleans cathouses and Easy Rider Redux?

But this is the Ironbutt, and the riding is *hard*. In South Dakota, darkness brings the sharp chill of night. Riding



Eight-thousand miles of Magic Fingering. Canyon-racing Egloff and the Rotary. Rattlesnake-tough Davis on the Venture. Wasp-drilled Pease's goodie-laden Bimmer.



TEXAS TETE-A-TETE

War stories in Seattle: Newberry goes catatonic when asked how many tickets he's collected. Eastwood rode eyeball-to-eyeball at 111 mph with a Minnesota trooper. Swetland rode 27 straight hours out of Montgomeryville. Egloff and Thompson have had two hours of sleep in the past 3300 miles. We all stumble around Lynnwood Cycle Barn, rabbit-eyed. Nine riders have zeroed the checkpoint. Pharaoh has collected six tickets, and outrun nine *other* citation-minded troopers. Aughinbaugh is an hour late. So how did the Softail and I make the Big Zero? (Was it desperation to maintain my integrity as a motorcycle journalist by dredging strength from the muck of my battered innards, carrying valiantly, onward to glory?)

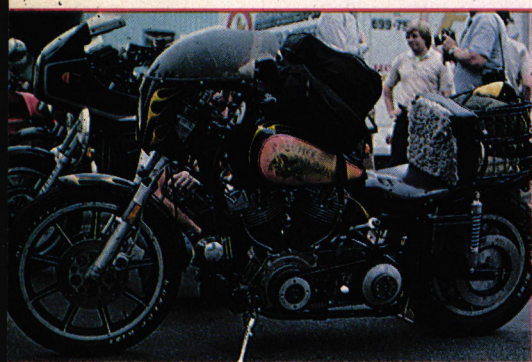
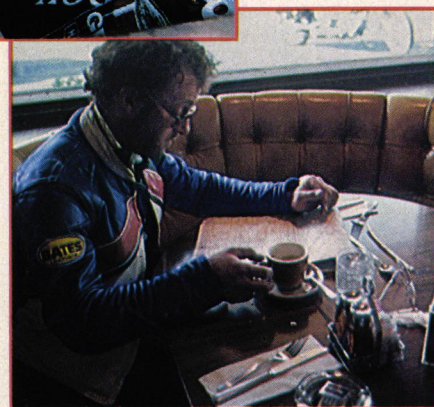
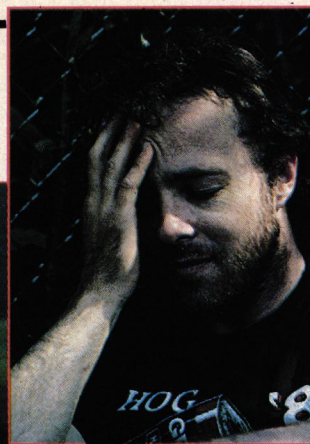
These questions unanswered, the Softail and I roll down I-5 to San Diego.

Continued

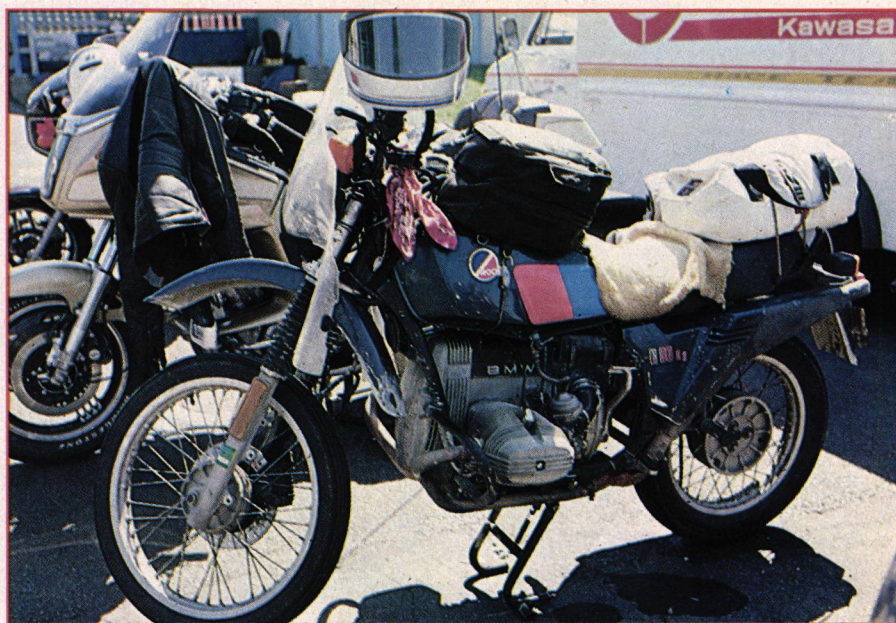
Ironbutt the hard way, I've cleverly left most of my cold-weather gear in sunny Los Angeles. My liver's freezing, and three cups of coffee only keep me going for another teeth-gritted hour. At last, after miles of desolation, there's a \$19 motel, the sign feebly glowing on the horizon. It takes three electric alarms to awaken me after three hours of sleep. The Wyoming countryside grows rugged: The Softail complains about high altitude and stiff headwinds. It will be a mind-breaking run into Seattle tomorrow, with no chance of collecting the Yellowstone or Havre bonus points. Two

thousand miles into the Ironbutt, survival alone will be an unexpected victory: The now-Montana sky blackens, thunderstorms hammering at me before I can struggle into my rainsuit. By Bozeman Pass, I can't feel my fingers or toes. About 10 at night in Bozeman, the Ironbutt's over for this hypothermia-stricken journalist who has dared the gods of marathon motorcycling. I flop onto a motel bed, so fatigued I can't even remove my sodden clothing. I've hit *The Wall*. I'm head-to-head with physical and mental collapse. Two lousy days, a Greyhound home. It can't end like this.

Harleying off to see America. One weary moto-journalist. Coffee, maps and lost again. Thompson's dual-purpose winner. Pharaoh's spare parts milk crate.



The Harley hits its stride midway through California with 4,000 miles (feeling like 40,000) on the odometer. I reflect on climbing The Wall in Bozeman: Four hours of sleep and then 80 mph through Montana and Idaho (with a speeding ticket in Couer d'Alene). The easy run to San Diego means six hours of sleep in Madera. Especially after the Bozeman fiasco, it's the straight and narrow for the Harley: no bonus points, Interstate the whole way. With Aughinbaugh's tardy Seattle check-in, I've saved face by nailing down next-to-last place. Maybe other riders will check into San Diego late because of their coastal-run bonus pursuit. One does: It's Pharaoh, who oversleeps and has mechanical problems. Now, it's eight riders with perfect zeroes, and the San Diego checkpoint brings more tales of tickets and canyon-racing. But the miles are showing. Newberry, Davis, Egloff, Thompson and I leave at 3 a.m.



After four hours of sleep, none of us is able to roust Aughinbaugh or Pease, who was drilled between the eyes by a wasp. The Softail's gas tank now sports a Magic Fingers 25-cent vibrating-bed sticker I've liberated from the motel, a reminder of the time in Idaho I thought I was going blind—until I slowed down and discovered my eyeballs were shaking in their sockets from the Softail's vibration.

The gods are with us as we motor across Arizona. By noon, it will be 113 degrees in Yuma, but we're in New Mexico by then. Aughinbaugh has resur-

rected himself from the dead. Pease suffers through the Wasp Escadrille, and passes us somewhere on the featureless terrain of never-ending Texas. By this seventh day of Ironbutt, all the riders look like extras from "Planet of the Apes." Aughinbaugh complains that his "ass is beginning to show definite signs of visible damage." But the Softail has shown its pedigree: While Newberry's been buttering his butt and *everyone* else is spastic, I can fake being tougher than I am because of the Harley's great saddle. To hell with the wind, vibration and the

Softail's 96-mph top speed: I've been able to ride without air seat, ointment or sheepskin seat cover. My upper arms feel like boysenberry jelly, but living the Harley mystique is worth it: In El Paso, I'm treated to the salacious grin and bare bazoom of a 200-pound woman who drives by and whips up her tee-shirt in a titillating tête-à-tête. Aughinbaugh wonders what the flap is about. But Texas Twiggy points thumbs down when she sees that *he* doesn't have the *savoir faire* to ride a Harley-Davidson.

DEAD SKUNK ON THE ROAD

Rest stops can no longer wash away the residue of fatigue: Aughinbaugh and I have gotten back into the saddles when it seemed impossible. In Texas, the Gold Wing rider thinks he's broken his big toe on a Botts Dot. With his damaged posterior, graunched toe, tardy check-in and waning spirit, Aughinbaugh is near the end. Even the sight of Pharaoh honking past us at 115, flames shooting from the exhaust, fails to cheer Aughinbaugh. With 500 miles to Daytona, the Gold Wing rider pulls over to sleep, a certain casualty of the marathon grind. But the tantalizing idea of a motel drives me through a wet night of impending hurricane, to Daytona. The next-morning checkpoint chatter centers on Pharaoh, who's late again. Everyone is certain the Arizonan at last has been jailed. Everyone else zeroes—Aughinbaugh included—and eight riders still have perfect zeroes. Maybe it *will* come down to tie-breaking bonus points. How am I going to explain my miscalculation to my mother? (Or worse, to the CG staff?)

It's too late to worry about the bonus points now. Maybe the fledgling hurricane will strand everyone else like beached whales, but it's the habitual 67 mph straight up I-95 for the Harley, where we pass by Georgia cracker farms, South Carolina firecracker stands and the cheap-cigarette billboards of North Carolina. But this is no time to reflect on the nuances of Motorcycling Off To See America: It takes everything I have to keep from oozing sideways off the saddle and becoming just another smoozed skunk on the road. I don't know how many miles are left. I don't care. I don't think I can zero this last leg. It's cold again. Sign says 75 miles to D.C. Got to stop at a Howard Johnson's. Never been this tired before. My head's snapping back like I have no neck muscles. No way am I getting back on the Harley. I'm going to fall asleep and drown with my nose in a cup of coffee.



Ironbutts (clockwise from upper left): Pharaoh, Swetland, Davis, Egloff, Newberry, Pease, Eastwood, Thompson, Mallet, Aughinbaugh.



Then it's Delaware and the best hallucination yet: A willowy blonde road construction worker languidly gazes at the passing Softail. She seductively swivels and sticks out her hitchhiking thumb. Ain't got no time, Babe: I'm on a roll to Montgomeryville.

MONTGOMERYVILLE MIRACLE

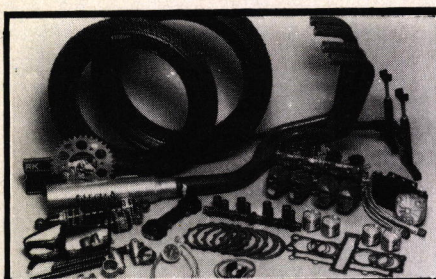
The riders are rubber-legged during the awards ceremony at Montgomeryville Cycle Center. Photographer Riles: "I don't know how you did it. This is more righteous than the Miracle at Lourdes!" Eight of us have zeroed all four checkpoints. Once the bonus points are tabulated, there is a four-way first-place tie (Davis, Egloff, Pease and Thompson). And there's a 10-way tie for exhaustion: Riders averaged about 30 hours of sleep during the 10-day "tour." One rider swore he saw E.T. alight from a UFO near Sacramento, and another the ghosts of his ancestors at a truckstop in Minnesota. Of course, we all fantasized about king-sized beds, hot showers, sleep—and other earthly phenomena.

Swetland (tie, 2nd) speaks for all of us when he thanks Eastwood (tie, 2nd) for epoxying him back onto the saddle when all Swetland wanted to do was die in peace. There was the tale of Egloff, Pease and Thompson, passed out, helmets still on, 10 feet from the side of the road in North Carolina. I think about Pease grinding out the miles when hurting; Aughinbaugh (5th) being a zombie in



Louisiana; Thompson doing the impossible on the dual-purpose Beemer; Egloff canyon-racing the RE-5; rattlesnake-tough Davis singing to keep himself awake; Newberry (3rd) blistering every highway; and all-or-nothing 6th place Pharaoh (aka "King Tut of the Ironbutt"), for running when all hope of victory was gone. And the next-to-next-to-last-place Softail? It had to be the most experiential motorcycle of them all.

At the much-anticipated victory dinner (which Rose has booked at another hotel, fearing we would trash the place and be tossed out on our Ironbutts), after the first toast, Eastwood and Davis fall asleep in their chairs, heads back, drooling on themselves. Even those who look awake are faking it. But the next day all 10 riders talk about the 1985 Ironbutt, making the roads tougher, the hours longer, The Wall higher. And the motorcycling legends greater.



PERFORMANCE!

RUSSELL STEEL BRAIDED BRAKE LINES

□ Single Disc Front	38.77	□ Rear Disc - 1 Line	24.77
□ Dual Disc Ft - 3 Line	58.77	□ Hydr. Clutch	25.77
□ Dual Disc Ft - 5 Line	94.77	□ Intrcpt Liquid Lines	84.77
□ DOT 5 Brake Fluid		9.00	

TELEFIX FORK BRACE

Precision fit. Aluminum. No shims. Made in Germany.



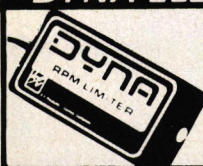
Reg. \$75.00
NOW \$61.88

Barnett CLUTCH KITS



Standard replacements & Extra Plate Racing Kits. CALL!

DYNA ELECTRONICS



★ 35,000 Volt Coils	57.88
★ Racing Plug Wire Kit	14.88
★ DYNA "S" Ignition	73.88
★ Rev Limiter	53.88

WISECO BIG BORE KITS

HONDA		SUZUKI	
750/836	\$219	750/816	\$229
750/890	339	1000/1100	229
900/985	249	1100/1168	239
KAWASAKI		YAMAHA	
550/615	219	FJ 6000/652	219
650/720	219	FJ 1100/1188	239
750/810	219	MANY MORE AVAILABLE	
900/1015	229	CALL!!	
1000/1105	299		
1100/1260	319		

EXHAUST SYSTEMS

★ KERKER ★ YOSH ★ BASSANI
★ SUPERTRAPP ★ VANCE

We'll BEAT ANY PRICE
In this magazine! CALL!

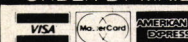
HELMETS

SHOEI Z-100	\$126.88
Tricolor	\$147.88
ER-7	\$91.88
ARAI A-VENT	\$105.88
SIGNATURE	\$128.88



CALL FOR
LOWEST Bell PRICES!

ORDER BY MAIL ★ ORDER BY PHONE



(818) 999-2811

COD or Money Order

FREE Shipping - 48 States

Racecrafters
INTERNATIONAL INC.

21505 Sherman Way, Canoga Park, CA 91303
Also: 16304 Hawthorne Blvd., Lawndale, CA 90260

PRODUCT EVALUATION:

BMW Multivario Tankbag

Vertical utility in modular design.



PHOTOGRAPHY: 1985 VIC HUBER

• Motorcycles with narrow fuel tanks, low handlebars or both have always created problems for riders who want to use tankbags. Because most BMWs fit that description, it's not surprising that BMW has fielded several tankbags manufactured primarily to fit its own bikes.

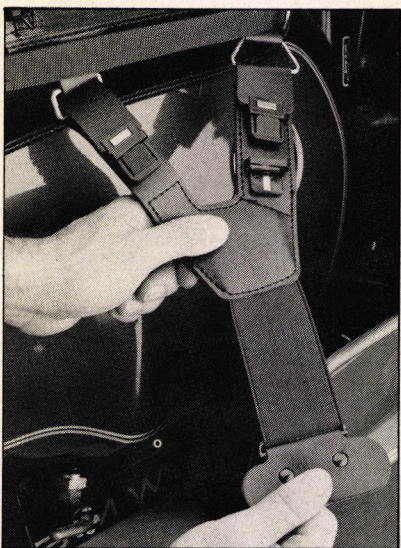
The latest line leader for this group is the Multivario, a name derived from the bag's variable nature. The Multivario consists of three sections, which expand vertically via a series of zippers. The top and center sections are reinforced nylon, and the top section contains both a zippered stuff pouch and a large, easily accessible clear map pocket. The hard-shell leather lower section mounts to the bike with a pair of Y-shape, leather-and-elastic straps. A plastic-coated hook at the end of each mounting strap fastens to the tank's bottom seam to hold the Multivario in place. Moreover, five permanent magnets in the bottom of the bag provide an alternative mounting system. An additional strap mounted to the bag's base functions as a carrying handle or shoulder strap; its length adjusts via a buckle and a series of D-rings on the side of the bag.

But adjustable straps and alternative mounts are relatively minor; the real point of the Multivario is the storage it can provide, and the way it provides it. At first glance, the Multivario seems

complicated, but the idea is simple: Two circumferential metal-and-plastic zippers allow you to tailor the bag to any of four sizes, depending on which zipper runs are used. The minimum size is obtained by removing the entire center section—which contains three zipper runs—and attaching the top piece to the bottom piece. According to BMW, this combination gives approximately 570 cubic inches of storage.

But that's barely a quarter of the Multivario's capacity. With the center section zipped on and fully jammed, the tankbag is nearly 16 inches tall, and at first glance seems to be utterly absurd. When mounted on something with really low handlebars, the top of the bag just touches the rider's chest, and the map pocket seems only inches below his faceshield. But all the control and visibility required for operating the motorcycle and comfort still are available, and the payoff is genuinely huge carrying capacity: The factory specs it at more than 2000 cubic inches but that number doesn't begin to convey the volume the bag provides.

Nor can mere numbers suggest the quality of the fittings, or the well-considered design of the whole system. As an optional accessory, BMW sells an international-orange rain cover (suggested retail: \$18.69) that combines stainless



Multivario's straps and zippers

Stretching bounds of tankbag design.

snaps and elastic to hold the cover onto the bag at any of its sizes, and the rain cover's top is crystal-clear plastic. In keeping with the quality of the rest of the bag, the cover's seams are both sewn and heat sealed, and did not leak.

That doesn't mean the Multivario isn't without drawbacks, the major one being the BMW-specific design. The company doesn't see it that way, of course; BMW literature underlines the utility of the bag for other bikes, and the adjustability of the straps combined with the magnets' considerable power suggest that BMW might be right. Certainly I never discovered any disincentives to using the bag, and indeed, found that for many missions, I could leave my saddlebags in the garage, carrying everything from strawberries to Department of Defense telephone books in the bag. The Multivario also makes it possible to carry such items in the top section and wet rain gear in the bottom, because the center section has a bottom sewn in, which can separate wet gear from dry.

The price for all this utility—\$111.38 suggested retail—might seem dear, but with the Multivario BMW has produced a bag of unsurpassed quality and utility for those people trapped between low bars, a skinny tank and a long ride.

—Steve Thompson

35mm Color That Comes Alive



Prints and Slides from the same roll

Eastman Kodak's professional color motion picture film . . . adapted for still use in 35mm cameras by Seattle FilmWorks. With micro-fine grain and rich color saturation, its quality meets the exacting standards of Hollywood filmmakers. You get remarkable versatility: shoot in low light or bright light at ASA ratings from 250 to 800; use it indoors or out without a filter; and you have the option of prints or slides, or both, from the same roll. Enjoy the very latest in photographic technology with substantial savings.

©1983 Seattle FilmWorks

INTRODUCTORY OFFER

- ☐ Rush me 2 rolls of 20-exposure Kodak 5293®. Enclosed is \$2.00. I'd like to be able to get color prints or slides (or both) from the same roll and experience the remarkable versatility of this professional quality film. Offer limited to 2 rolls per customer.

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

YA19

Mail to:
Seattle FilmWorks
500 Third Avenue West
P.O. Box C-34056
Seattle, WA 98124



FAST FREDDIE

FREDDIE SPENCER
WORLD CHAMPION, USES



100% CALF SKIN LEATHER GLOVES

FAST 1 TOURING

BLACK ONLY

LADIES' SIZES: XS, S, M, L
MEN'S SIZES: XS, S, M, L, XL, XXL

FAST 1 RACING

WITH PALM RIVETS
RED, BLUE, BLACK OR WHITE

MEN'S ONLY: XS, S, M, L, XL, XXL

BOTH
MODELS
\$44.95
PER PR.



*Freddie
Spencer*

ORDER BY
CALLING:

800-628-4040

IN MA. 413-734-6211



**MOTO
RACE**

P.O. BOX 861, WILBRAHAM, MASS. 01095

PRODUCT EVALUATION:

Wolf Pack

More than an afterthought.

• Fanny packs are hardly news to serious dirt riders. The "butt bag" is used by playriders, enduro competitors and desert racers, and has become the most popular way to carry basic tools, food and water into the outback on a bike. But motorcyclists who use a fanny pack know that most hip luggage rarely stays in its proper place. The Wolf Pack was designed specifically to stay in position, and to allow riders to take full advantage of the convenience of the fanny pack.

Most butt bags tend to slide down the rider's waist, and get caught between the motorcycle seat and the rider's rear. To prevent sliding, the Wolf Pack has a foam stiffener sewn into the pack where it contacts the rider's back. Combined with a sturdy 2-inch nylon belt, the foam makes for a semi-rigid mounting system that helps keep the bag where it belongs, even when it's completely stuffed with tools and food. In addition, the foam pad provides a measure of comfort, and helps protect the rider from any hard objects in the bag.

The Wolf Pack makes it easy to keep the contents of the bag separate, too. Inside, there is a map pocket sewn into the back of the pack, and two smaller Velcro-closed pockets are attached to the corners. Also included with the pack is an envelope-style tool roll that fits inside the main compartment.

But with the Wolf Pack, the main bag is just part of a larger system. Available as options for the pack are a canteen and a bottle holder. The one-quart plastic canteen is held securely by large metal snaps in a nylon bag, which attaches to the pack belt with two military-style steel clips. Also available is a bottle pouch, sized just right for a 12-ounce container of two-stroke oil or a small can of flat-fix. The pouch closes with a Velcro strip at the top, and attaches to the belt with the same type of metal clips that hold the canteen. Like the main bag, those two accessories stayed in place and never interfered with the rider during our testing.

And the simple fact that the Wolf Pack knows its place—and stays there—makes it one of the very best fanny packs available to dirt riders today. It is comfortable enough to wear all day, and is a highly refined piece of riding gear. The pack and its accessories are made of 1000-denier Cordura nylon, in red, blue or camouflage, and each piece is sold separately: The pack costs \$34.95; the canteen and pouch are \$12.95; and the bottle pouch is \$4.95. An accessory belt for the canteen and bottle pouch is \$7.95. For more information, contact Wolf Products, Dept. CG, 3243 Arlington Ave., Suite 203, Riverside, California 92506.

—Paul Van Zuyke



PHOTOGRAPHY © 1985 RICO MANDEL

This is one piece of luggage that stays where it is supposed to

Which puts it at the front of the pack.

ROAD TEST:



© 1985 DAVID BUSH

Suzuki GS700E

A two-year-old meets the ITC.

It's no secret that general-purpose bikes are on the endangered-species list. Specialized bikes have proved to be a much hardier breed, all but crowding out the wide-band models. Today, you'll find specialized motorcycles for distinct styles of riding, whether it's sport riding, cruising, touring, sport-touring, or even sport-cruising. Standard models have become few and far between, and specialized motorcycles are the new order.

Suzuki, however, seems to be playing

BY PAUL VAN ZUYLE

the conservationist, by offering the GS700E. This new 700 *looks* like a general-purpose motorcycle, because it has none of the earmarks that help identify a motorcycle's special role, such as a sport-bike's fairing and low handlebar, or a street cruiser's teardrop fuel tank and pullback bar.

Has Suzuki turned back the clock to the days of everyman's motorcycle? Yes and no. Yes, at least, to 1983. Because mechanically, this motorcycle is much the same as the 1983 GS750E. Both bikes have virtually identical air-cooled inline-four engines, and the same basic single-shock chassis. And no, because this is not a general-purpose bike; that 1983 model was a full-blooded sport machine, and a few cosmetic changes and the loss of 48cc don't turn a wolf into a sheep.

Continued



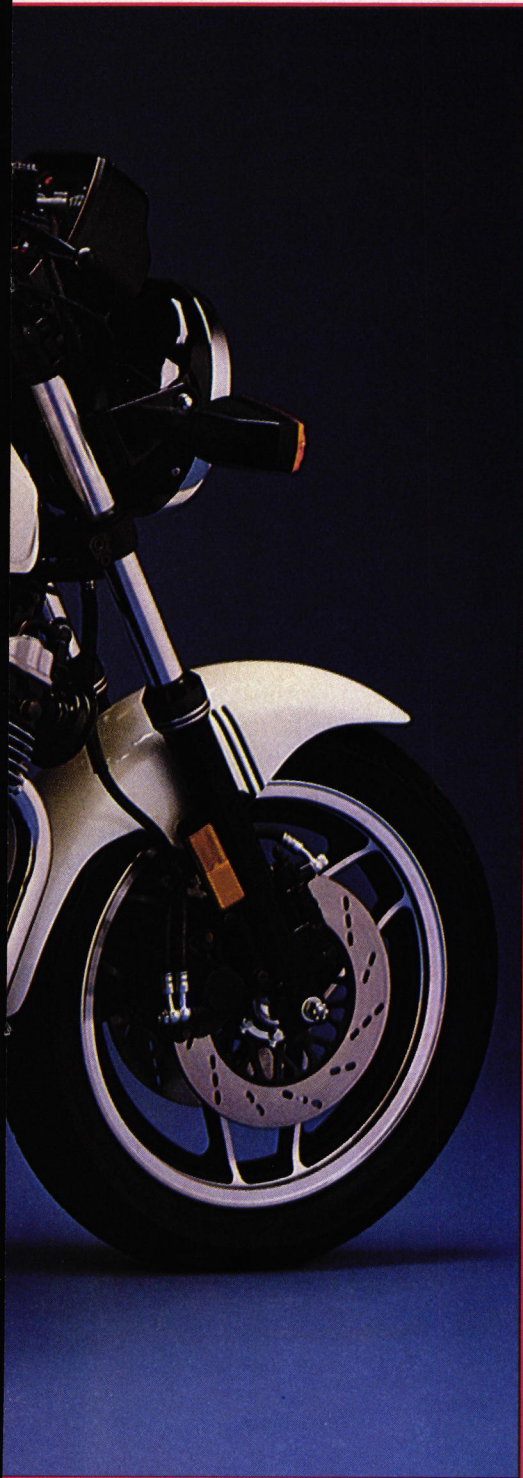
To avoid paying the ITC's tariff on imported motorcycles displacing more than 700cc, Suzuki reduced the 750's engine capacity to 699cc. The engineers cut down the crankshaft stroke from 53mm to 49.6mm, while retaining the 750's 67mm bore. In order to get back the power lost through the reduction in displacement, Suzuki increased valve lift 0.7mm for the exhaust valves, and 0.5mm for the intake poppets. In addition, exhaust valve timing has been lengthened

11.893 vs. 11.978: Oh, ITC, where is thy sting?

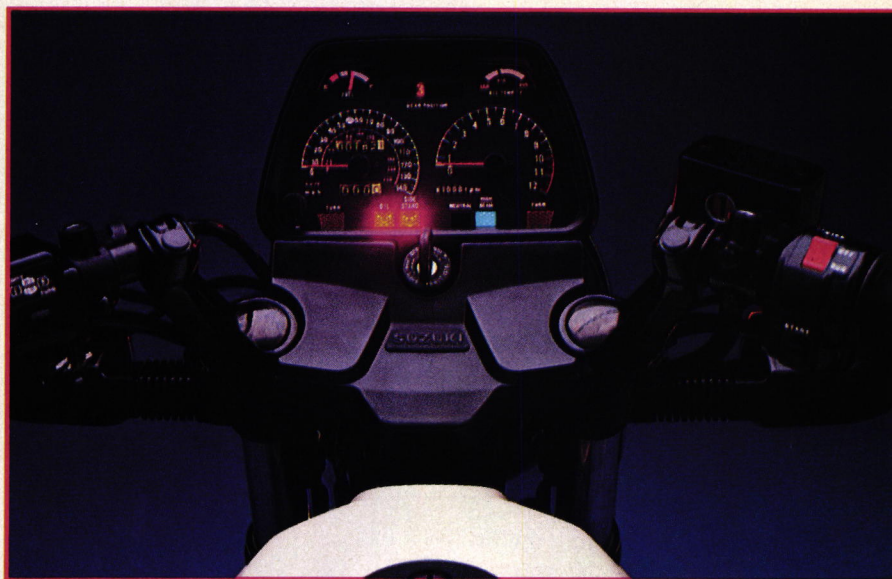
by 4 degrees, and valve overlap has been increased 2 degrees.

Through those modifications, plus two extra teeth on the countershaft sprocket, Suzuki has come very close to maintaining the original dragstrip performance of

the GS750E we tested in 1983. The Suzuki is the quickest and fastest 700 we have tested to date, and is only fractionally slower than the 750 it replaced. Such performance is a singular triumph, considering that other 700s have lost significant horsepower in the downsizing process. Moreover, the '85 700 doesn't feel any weaker than the 750—but the bigger motor was hardly a tractor-pull champ to begin with. Like the 750, the new bike starts making usable power at 3000 rpm,



© 1985 DAVID BUSH



GS700E's instruments are a familiar face in new surroundings

For 1985, Suzuki clipped the fairing.

and increases its output in a linear fashion up to redline. Compared to a Honda VF700S Sabre, for instance, Suzuki's GS700E makes less power below 5000, and more power above that, until well past its 10,000-rpm redline.

Transmitting that power to the rear wheel is a five-speed gearbox and clutch that are also unchanged from the 1983 model. Change wasn't wanting there, though, because the transmission shifts smoothly, in part due to little flywheel

effect from the quick-revving engine. In addition, the clutch retains its wide engagement band, which makes the motorcycle a pleasure to ride in traffic. But a small hesitation in throttle response mars the 700's rideability somewhat, and the Suzuki produces a high-frequency buzz that is typical of inline-fours. Although the rider is well-isolated from that vibration, at freeway speeds the mirrors blur, and the passenger pegs can put a pair of feet to sleep in minutes.

Other than the footpegs, the passenger accommodations are good—for a sport-bike. For the rider, the controls are positioned more for handling curvy roads than for stretching out on the Interstate. Combined with a low, notched seat, the rearset footpegs provide little room for stretching out. But leg cramps shouldn't be a problem, because the 700 has considerably less cruising range than the 1983 model. For 1985, the gas tank has been reshaped into a slim, low vessel that

Continued

holds 1.2 gallons less than the tank on the 750. California models lose an additional 0.8 gallons of capacity to evaporative-emissions-control equipment required for bikes sold in that state.

Fuel capacity, however, is not the only feature which has been diminished in the translation from 1983 to 1985. Handling, too, has suffered. At speeds less than 30 mph, the Suzuki reacts in an exaggerated fashion to pavement irregularities, especially those that parallel the path of the bike; a ridge in the road causes the 700 to rock from side to side. And in cornering performance, the GS700 displays some unusual habits. At low speed, the bike steers quickly into a corner, then tries to stand up before the rider has finished turning. Further, at speeds up around the legal limit, the Suzuki tends to resist combined braking and turning maneuvers, and falls into a curve when the brakes are released, often past the rider's intended angle of lean. And at racing speeds, the rear end occasionally wallows, which can affect the steering. The Suzuki's steering is sensitive, and reacts

Downsized, but not in 1/4-mile performance.

to every input, intended or not. On top of that, the 700 steers imprecisely, and requires constant corrections to keep the motorcycle on its intended path around a corner. In short, the Suzuki is easiest to ride on smooth roads at moderate speeds, where turning ability is more important than stability.

Part of the GS's quirkiness is due to its unusually narrow front tire. The front Bridgestone is a 100/90-16, a size usually seen on 550-class motorcycles. Our front tire wore out after just 1700 miles of moderately fast riding—long before the rear rubber. We replaced the stock tires with a 120/80-16 Dunlop K391F Sport Elite



COMPARATIVE TEST DATA:

Make and Model	Quarter-Mile, sec/mph	Top Speed, mph	Weight, lbs.	Stopping Distance From 60 mph, ft.
Suzuki GS700E-'85	11.978/112.21	125	485	140
Suzuki GS750E-'83	11.893/112.92	131†	485	135
Honda VF700S Sabre-'85	12.358/109.09	121	514	136
Kawasaki KZ700-'84	12.422/107.01	127	483	133
Honda VF700F Interceptor-'84	12.323/106.50	124	512	136
Honda Nighthawk S-'84	12.048/109.75	125	492	125

† indicates a calculated top speed

front tire, and a 130/90-17 Dunlop K391S rear. The larger front tire didn't completely alleviate the GS's wallowing at a racing pace, but it did slow down the 700's steering slightly and greatly increased rider confidence at low speeds.

One stock item that works well at low speed is the Suzuki's rear shock. Its soft springing provides a comfortable ride over the ripples and joints found in boulevard pavement. But the shock doesn't have enough rebound damping for serious sport riding, even at its stiffest setting (of four). And the same spring that makes for a comfortable freeway ride is too soft for serious canyon-carving, because when you hit a bump while leaned over, the bike runs out of cornering clearance. When that happens, solidly mounted parts hit first, namely the exhaust pipes and the centerstand feet, which can lever the wheels right off the pavement. That's a trait carried over from the '83 GS750E, and one that inhibits a rider from using all of the bike's otherwise good cornering clearance.

The GS700E also shares the 750's front brake and hydraulic anti-dive mechanism. As before, brake-line hydraulic pressure closes off a valve that increases fork compression damping. And, as on the 750, the 700's system has an imperceptible effect on front-end dive. To make matters worse, the front brake requires heavy lever pressure for quick stops, and provides little feedback.

Although the Suzuki retains the chas-

sis specifications of the 1983 750, it has lost some of its sportbike prowess for 1985. And unfortunately, it hasn't gained any general-purpose competence to make it more useful for riders who don't live for the next corner. Suzuki missed the chance to improve upon the GS750, and put what is essentially a two-year-old motorcycle back into production. So what does the 700 have to offer? Speed, as the quickest of the 700's, and price. At \$3099, the 700 costs the same as the 1985 Suzuki GS550ES.

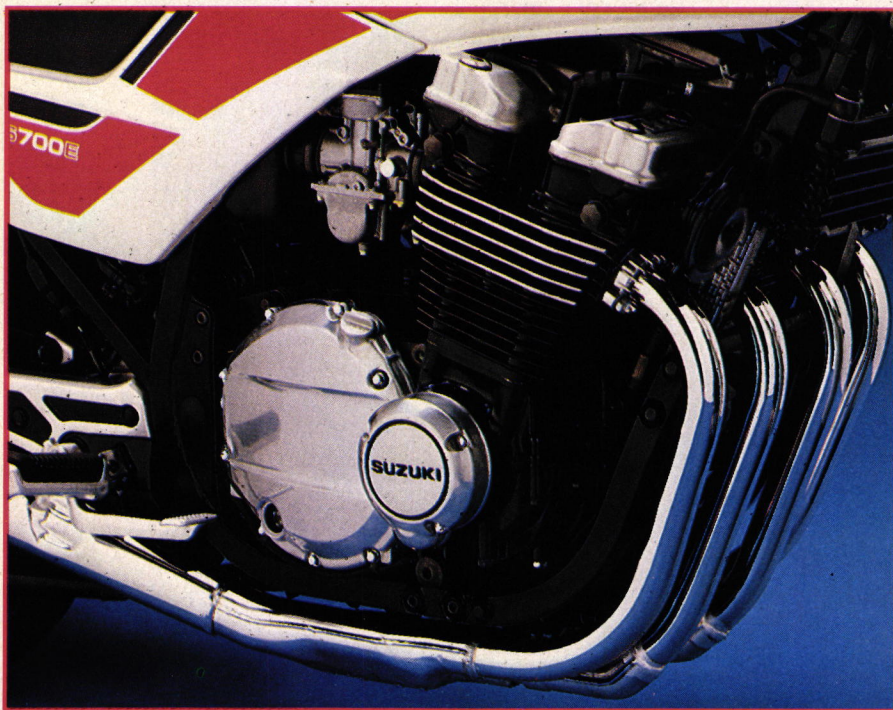
Like the 550, the 700 is not a general-purpose motorcycle, nor does it have its origins in one. There's simply too much sportbike here to suit most middle-of-the-road riders. But it also lacks the backroad prowess of the GS550, and it's unlikely that sport riders will be satisfied by the 700, since it has so many shortcomings when pushed hard. Thus, the 700 is consigned to an ambiguous role, because in the two years since the GS750E was introduced, this design has only aged, not improved. ●

Nits:

- Chain-adjustment marks on swingarm misaligned.
- Long warmup time.
- Shock's preload is difficult to adjust.
- Hard-to-reach fuel petcock.

Picks:

- Easy-to-use turnsignal/high-beam switch.
- Bright 8-inch headlight.



The Suzuki TSCC engine has been destroyed from 747cc to 699cc

To slip in under Uncle Sam's tariff on big bikes.

Ride Review

• It should be obvious that the ITC's tariff has ushered in a new era of reductions in motorycling: lower prices, lower displacement—and in almost every case, lower performance. Practically every 700, nee 750, we've tested has lost a significant amount of horsepower and performance in the course of downsizing.

But not Suzuki's GS700E. Its dragstrip performance shows that *this* tariff-buster nearly matches its predecessor in terms of peak horsepower; terminal speeds (a good indicator of peak power) between the two bikes are virtually identical. To be sure, the rest of the bike is no more capable than the '83 GS750E it replaces; it still needs more shock rebound-damping and better tires. But the GS700E still deserves a medal for that motor. —Charles Everett

• I must be in a minority, but I truly lament the passing of general-purpose motorcycles. There's something inherently honest about a bike that doesn't pretend to be the latest Superbike contender or the flashiest boulevard brawler. And the ITC Suzuki, with its bare front end and high bars certainly looks the part.

But stripping the fairing off a sportbike doesn't make it suitable for lunchbucket commuting or soft-saddlebag touring. So don't be fooled by the GS's naked exterior: The bike's 5000-rpm cold starts, barren midrange and asthmatic carburetion can make it frustrating in everyday use, and the GS's twitchy low-speed handling makes it particularly nervous in traffic. So the GS might look like one of the last GP bikes, but as far as I'm concerned, it's nothing more than a clipped-wing flier.

—Jim Miller

• Miller must still think the world is flat if he believes the Suzuki isn't multi-purpose. Sure, after a hundred miles on the 700, my aching shoulder blades and stiff wrists *try* to convince me that this is a sportbike, nothing more. And yes, taking off from stoplights, I find myself slipping the clutch for what feels like two blocks, due to the 700's peaky motor. I'll even agree with Gentleman Jim that the Suzuki's front tire reminds me of a bloodhound with its nose to the ground, twitching from side to side.

But if Miller thinks these traits render the sweet Suzuki into something less than a great all-purpose motorcycle, he's flat wrong. I admit to a bias in favor of corner-carving and full-goose sport riding. But I'm sophisticated enough in my tastes to know that the sportbike-flavored GS700 is also mainstream.

—David Mallet

CYCLE GUIDE SPECIFICATIONS

Suzuki GS700E

street

IMPORTER: U.S. Suzuki Motor Corp., 3251 East Imperial Highway, Brea, California 92621

SUGGESTED RETAIL PRICE: \$3099

ENGINE

Type four-stroke transverse vertical four
Valve arrangement double overhead camshafts,
four valves per cylinder
Bore and stroke 67.0mm x 49.6mm
Displacement 699.5cc
Compression ratio 9.6:1
Engine redline 10,000 rpm
Carburetion four 32mm Mikuni constant-vacuum
Air filter disposable paper element
Lubrication wet sump
Starting system electric only
Ignition transistorized breakerless
Charging system 12-volt; 310-watt alternator,
voltage regulator/rectifier, 14-ampere-hour battery

DRIVETRAIN

Primary drive helical gears; 1.896:1 ratio
clutch wet, multi-plate
Final drive #530 O-ring chain (5/8-in. pitch,
3/8-in. width); 3.214:1 (45/14) ratio

Gear	Internal gear ratio	Overall gear ratio	MPH per 1000 RPM
I	2.500	15.234	4.88
II	1.750	10.664	6.97
III	1.368	8.336	8.91
IV	1.130	6.886	10.79
V	0.957	5.832	12.74

SUSPENSION/WHEEL TRAVEL

Front Showa air-spring
37mm stanchion tube diameter,
brake-actuated hydraulic anti-dive/
6.4 in. (163mm)
Rear single Showa shock,
4-position adjustable rebound
damping, 18mm spring preload range within
22 turns of adjuster/5.4 in. (136mm)

BRAKES

Front dual single-action hydraulic calipers,
10.1-in. (257mm) effective disc diameter
Rear double-action hydraulic caliper,
10.1-in. (258mm) effective disc diameter

TIRES

Front 100/90-16 54H Bridgestone
Mag Mopus G515 tubeless
Rear 120/90-17 64H Bridgestone
Mag Mopus G514 tubeless

DIMENSIONS AND CAPACITIES

Weight 485 lbs. (219.9kg)
Weight distribution 48.8% front, 51.2% rear
Gross vehicle weight rating (GVWR) 990 lbs. (449kg)
Load capacity (with full fuel tank) 481 lbs. (218kg)
Wheelbase 59.2 to 60.5 in. (1505 to 1537mm)
Seat height 31.1 in. (790mm)

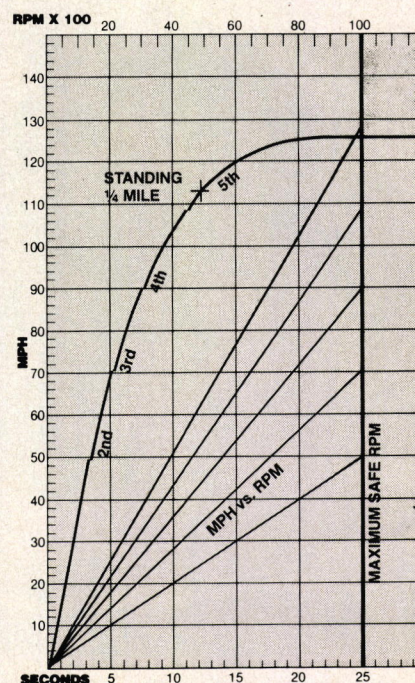
Handlebar width 28.9 in. (735mm)
Footpeg height 13.6 in. (345mm)
Ground clearance 5.4 in. (138mm),
at exhaust crossover
Steering head angle 27.8 degrees from vertical
Front wheel trail 4.13 in. (105mm)
Frame tubular and square-section mild steel,
double front downtubes
Oil capacity 3.4 qt. (3.2l)
Fuel tank steel, 4.0 gal. (15.5l), including
1.2 gal. (4.7l) reserve
Instrumentation speedometer, odometer, tripmeter
resettable to zero, tachometer, fuel gauge,
oil temperature gauge, digital gear indicator

PERFORMANCE

Fuel consumption range 27 to 53 mpg (11 to 23 km/l)
Average fuel consumption 40 mpg (17 km/l)
Cruising range, maximum 108 to 212 miles
(174 to 341km)
Cruising range, reserve only 32 to 64 miles (51 to 103km)
Speedometer error, 30 mph indicated 30 mph actual
Speedometer error, 55 mph indicated 52 mph actual
Best 1/4-mile acceleration 11.978 sec.,
112.21 mph (181 km/h)
Top speed (observed) 125 mph (201 km/h)
Stopping distance from 30 mph 33 ft. (10.1m)
Stopping distance from 60 mph 140 ft. (42.7m)

WARRANTY: 12 months, unlimited mileage

AVAILABLE COLOR: red-and-white; blue-and-white



ROAD TEST:

Honda VF700S Sabre

The "V" Stands for Versatility.

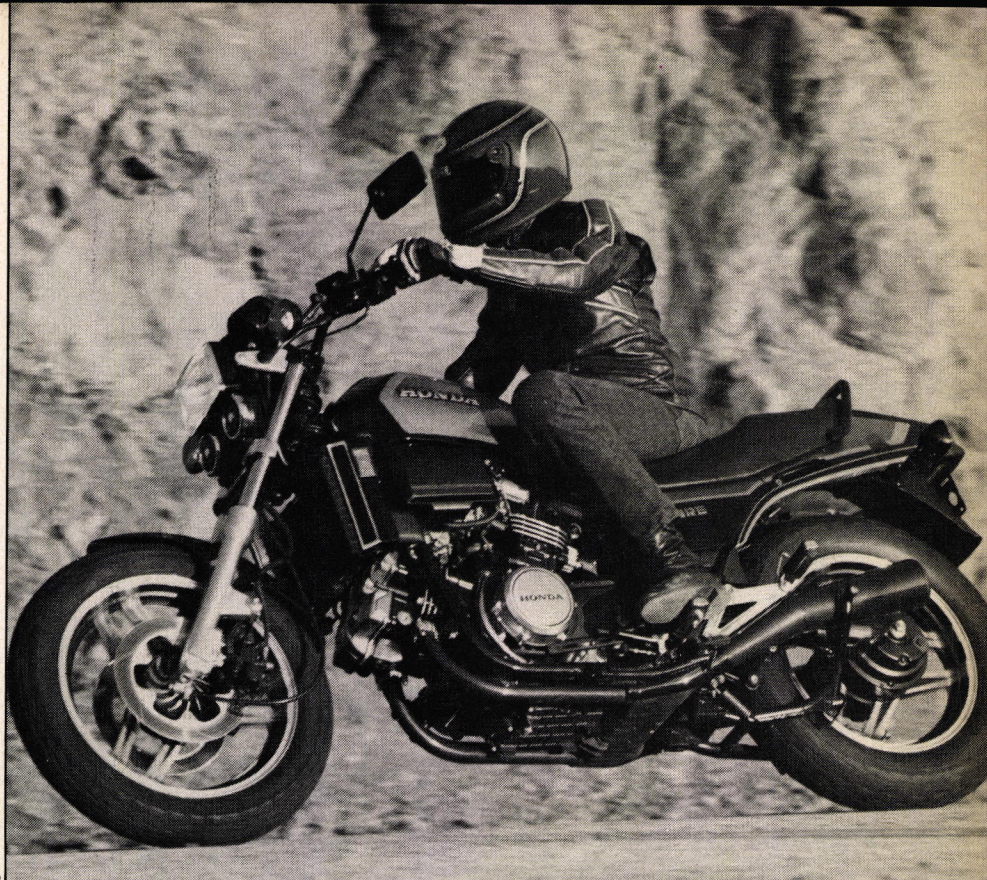
• What's in a name? Not nearly enough, at least not in the case of the VF700S Sabre. Honda calls it a sport-tourer, but it's not *merely* that; the Sabre's attributes—speed, comfort and smoothness—make it a capable, all-around performer.

In fact, versatility has been the Sabre's stock in trade since the bike's introduction as a 750 in 1982, and that broad-band, agreeable nature hasn't been altered since then. But that doesn't mean the Sabre hasn't changed; it has. The bike got a new frame in '83, and in '84 received stiffer springs front and rear, as well as caged ball bearings in place of tapered rollers in the steering head. Also on the list for '84 was a shorter stroke that brought engine displacement down to 698.9cc, allowing the Sabre to slide past the ITC's tariff on imported motorcycles displacing more than 700cc.

As a result of that downsizing, the 700's motor lost six horsepower compared to the 750's (a claimed 76 for the 700); camshaft duration and valve lift were reduced to bolster midrange power, though, and the engine also got a numerically higher primary drive ratio. But for 1985, the Sabre remains much the same, marked by new graphics, a switch to needle bearings in its single-shock Pro-Link linkage, and a reshaped saddle.

Those last two changes have increased the VF-S's versatility significantly. The 750's saddle wasn't comfortable for long stays, and the bike's ride was, in a word, harsh. The 700's saddle, on the other hand, is comfortable enough for all-day jaunts, and the needle bearings allow slightly freer rear suspension movement and better ride quality. True, some sharp-edged paving irregularities still jar the Sabre rider, but overall, the 700's suspension action is much improved, making the bike more suitable for chasing around town—or for chasing horizons on the Interstate.

No change in character accompanied the motor's loss of displacement, however. The liquid-cooled, shaft-drive, 90-degree vee-four remains one of the most civilized powerplants in all of motorcycling, marred only by drive-line lash and some shaft-induced chassis-jacking. Power delivery is as smooth and predictable as the 750's, and almost none of the motor's vibration makes



© 1985 DAVID BUSH

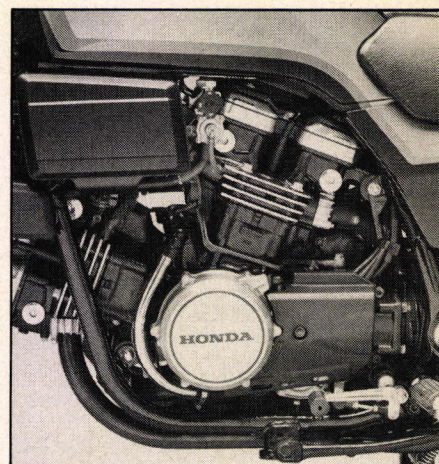
its way to the rider. The engine's midrange feels unremarkable, despite Honda's tuning tricks, but the Sabre has a rewarding top-end surge starting at about 7000 rpm. There's good low-end power, too, which is helpful whether you're doing the urban crawl or trying to make a quick corner-exit on the backroads.

Nonetheless, backroad rushing isn't the Sabre's forte. The bike feels at home at brisk, sport-touring speeds, and remains stable and secure through turns. When

HONDA VF700S Sabre

Importer: America Honda Motor Co. Inc.
100 West Alondra Blvd.
Gardena, California 90247

Category	street
Suggested retail price	\$3398
Engine type	liquid-cooled four-stroke 90-degree tandem vee-four
Valve arrangement	double overhead camshafts, four valves per cylinder
Bore and stroke	70.0mm x 45.4mm
Displacement	698.9cc
Compression ratio	10.5:1
Carburetion	four 32mm Keihin constant-vacuum
Gearbox	6-speed
Front fork/wheel travel	Showa air-spring, 37mm stanchion tube diameter, brake-actuated hydraulic anti-dive/5.6 in. (143mm)
Rear shock/wheel travel	single Showa air-spring shock, 4-position adjustable rebound damping/4.0 in. (102mm)
Wheelbase	62.1 in. (1578mm)
Seat height	33.4 in. (849mm)
Weight	514 lbs. (233.1kg)
Steering head angle	30.5 degrees from vertical
Front wheel trail	4.61 in. (117mm)
Best ¼-mile acceleration	12.358 sec., 109.09 mph (176 km/h)
Top speed (observed)	121 mph (195 km/h)
Stopping distance from 60 mph	136 ft. (41.5m)
Fuel consumption	28 to 48 mpg (12 to 20 km/l)
Warranty	12 months, unlimited mileage
Available colors	black-and-blue; black-and-red



© 1985 GILBERT LUNA

Honda calls the Sabre a sport-tourer

But it fits any role to a vee.

you're really charging, though, you'll notice the Sabre's sluggish steering response, the result of a combination of a long (62.1 inches) wheelbase, slow steering geometry and an 18-inch front wheel. And fast, bumpy corners reveal the rear shock's insufficient rebound damping, which contributes to a slight wallow at speed.

A Sabre pilot, then, probably won't be showing up riders on pure sportbikes, but he won't have to watch them clear off, either. More important, he won't be limited to one type of riding, because the VF700S is one of those rare machines that thrives because of its lack of specialization. The bike offers a balanced set of capabilities that lets a rider experience motorcycling in broad terms. So Honda can call the Sabre a sport-tourer if it wants to. We know it's more—much more.

—Charles Everitt

LONG-TERM TEST:

Honda XR250R

*A four-valve head with
dirty thoughts.*

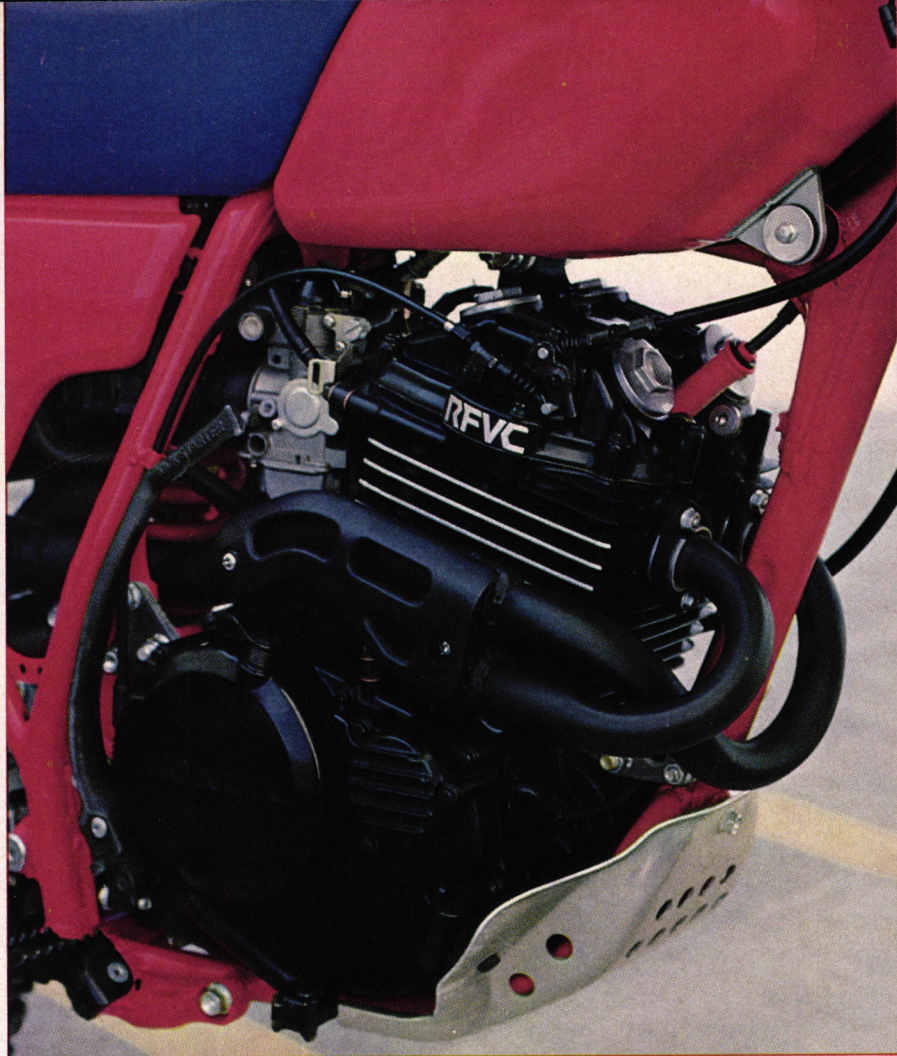
• Ever since two-stroke dirtbikes started winning races regularly, their four-stroke competitors have had trouble keeping up. Certainly, each successive generation of thumpers has come closer and closer to challenging the two-strokes, and four-strokes have gotten lighter, more powerful and better handling. Even so, they've remained the underprivileged cousins of their two-stroke counterparts.

Nowhere has the two-stroke's superiority been as obvious as in the 250cc class. Honda threatened that domain, though, with the introduction of the all-new XR250R in 1984. The bike set new class standards, largely because it was built *up* from the successful XR200R rather than *down* from the XR500R. At 243 pounds and with a claimed 28 horsepower, the XR250R is considerably lighter, more agile and more powerful than its predecessor. With Honda's Radial Four Valve Combustion chamber (RFVC) cylinder head coupled to a dual-carburetor intake system, the 249cc counterbalanced single-overhead-cam single offers a good combination of plonking torque and high-revving horsepower.

Much of the credit for the XR's balance of power stems from its dual 24mm Keihin carburetors. The left carb handles the fuel-mixing chores up to one-third of the throttle's rotation, at which point the main-jet-only right carb joins in. Yet despite such a sophisticated setup, the XR still staggers occasionally when the throttle is snapped open at low rpm, as when exiting a slow corner on a tight trail.

Tight woods or open sections, though, there never was a situation in which the XR's six-speed gearbox didn't have the right gear. And in more than 2000 miles of hard trailriding—including several enduros—neither the gearbox nor the clutch displayed any weaknesses. In fact, on the subject of the XR's shifting, there's little to report; the only problem occurred when the mild-steel shift lever got bent in against the sidecover a few times. It was easily straightened, and the fact that the shift and brake levers both have spring-loaded folding tips reduced the problem even more.

Bringing the XR to life certainly isn't a problem—at least not when it's cold. A pair of compression releases—one manual and



Radial Four Valve Combustion chamber engine is easy to start when cold

And it's not when it's hot.





one kickstarter-actuated—make firing up the cold XR motor a simple, one- or two-kick proposition. Sometimes the XR can be reluctant to light off when it's hot, though. Admittedly, it's possible to bump-start the bike by using the manual release; otherwise, the rider has to turn off the fuel tap, pull the compression-release lever and pump the kickstarter five or six times. After that routine, the engine usually fires up.

Routine maintenance, fortunately, is simpler than starting the hot XR. Its four valves have screw-type adjusters, which are accessible through four threaded caps. We never had cause to make use of the adjusters, though, because our XR required no valve adjustment throughout the test. Neither did we tinker with the cam chain, which is controlled by an automatic tensioner. For all practical purposes, the only maintenance our test bike required was regular servicing of the 520 O-ring chain, the foam air filter and periodic oil changes.

A change of oil was needed for the Honda's Kayaba front fork, too. We obtained the best results (for a 170-pound rider) by filling each 38mm stanchion tube with 11.5 ounces of 10-weight fork oil. And we got better results with the Pro-Link rear suspension by swapping the stock spring for a stiffer one (available from Honda dealers for \$50.26), which greatly improved the ride quality for heavier riders. Unfortunately, the stiffer spring overpowers the rear

shock's rebound damping, even when it's set at the firmest of its four positions.

Within the limitations imposed by its suspension and short (54.0-inch) wheelbase, the XR handles well. It slides predictably on command, and if the terrain isn't too choppy, the bike can be backed into turns with minimal body English. Weight transfer to the rear is inhibited by footpegs placed a bit too far forward, which translates into some side-hopping at high speeds. But a bike this short, with a 26-degree

steering head angle and 4.1 inches of trail, can't be expected to deliver desert-sled stability at a fast pace in the rough stuff. The XR250 is far more at home in the woods and on tight trails.

Even in close quarters, though, the Honda's handling is limited by its IRC Volcanduro tires. The front end plows in the loose stuff, and the rear is reluctant to hook up on almost any kind of dirt. With a Bridgestone M37 tire on the front and a Metzeler Multi-Cross on the rear, the XR became much more manageable on every kind of terrain.

Still, the terrain isn't a factor as far as the XR's front disc-brake is concerned. The stainless steel rotor and twin-piston caliper are as good as anything in their class, and provide strong, progressive braking under almost any riding conditions. But the rod-actuated non-floating drum-type rear brake is too grabby for use on loose downhills, and the rider has to rely on engine-braking to make up for the brake's weakness.

For the most part, though, Honda's XR250R remains a competent, multi-purpose trailbike; in the woods, the bike has all the right stuff. By reducing weight, increasing horsepower and improving handling, Honda has brought the quarter-liter XR one step closer to parity with the two-strokes. In fact, two-stroke riders better start looking over their shoulders—the XR is gaining fast.

—T.J. Rafferty



The XR's front disc brake is superb

On the trail of motocross technology.

PRODUCT EVALUATION:

Hondaline Two-Piece Rainsuit

Battle gear for the weather wars.

• The value of a good rainsuit is obvious to any rider who's been caught in a gullywasher without one. While some riders might choose to find shelter and await clear skies, others know that the proper gear, such as Hondaline's two-piece rainsuit (available through Honda dealers), can eliminate those stops by minimizing discomfort in foul weather.

Hondaline's suit is made of PVC-coated nylon, and the seams are overlapped, double-stitched and then heat-sealed with plastic tape. At the front of the jacket, a stout nylon zipper hides behind two flaps, the outer one secured by a Velcro strip. Double snaps, a hemmed elastic bottom, and a wide elastic belt in back give the jacket a snug fit at the hips and waist, and the drawstring hood folds up to become a tall mandarin collar. In addition, the pants are supported by adjustable suspenders with quick-release Fastex buckles. Velcro also secures the pant cuffs, wrists and collar, as well the flaps over the breast pocket and the pocket on the left leg. The pants have flared legs, and elastic stirrups keep them from riding up.

What matters most, however, is how the suit works in awful weather. And at freeway speeds in a serious downpour, the Hondaline suit proved to be well-sealed; there was no drippage down the neck, even without employing the hood, and no water came through the zipper, wrists or ankles. In fact, only one leak occurred, in the crotch of the pants. We couldn't necessarily fault the suit's construction for that, though; the crotch seams are securely joined, and sealed inside with a double-thick plastic disc. Although the heat-sealing process might have weakened the surrounding material, it's more likely that, in swinging a leg over the bike, the rider ripped the fabric between the seams. The Medium-size suit fit our 5-foot-10, 170-pound tester snugly, and permitted little range of motion in that critical area. Because the Hondaline suit seems otherwise well-constructed, we can't really fault it for the tear, and recommend trying one on while wearing riding clothes.

The only other problems we experienced with the Hondaline suit could be classified as generic deficiencies of PVC nylon. For instance, when the wearer touched his right leg on a hot exhaust pipe while placing a bike on its

centerstand, the momentary contact burned a dime-size hole in the suit. The other problem has nothing to do with the suit's durability or weatherproofing, though, and becomes apparent in warm, rainy weather. Because moisture can neither penetrate nor escape from PVC nylon, normal body heat transforms the suit into a portable sauna. Gore-Tex, a waterproof fabric that allows water vapor to escape, is an alternative to PVC nylon, but it's not yet widely available in designs specific to motorcycling, and would likely double the Hondaline suit's \$78 price. And a high-pressure spray of water *will* penetrate Gore-Tex, which limits its usefulness at high speeds.

Which leaves us with PVC/nylon, a material the Hondaline suit (also available in a one-piece design) makes excellent use of. This piece of raingear does the job in cold-to-moderate temperatures, and allows you to travel in relative comfort while other riders are huddling under freeway overpasses, waiting for the sun. —T.J. Rafferty



Hondaline suit is made of PVC/nylon
For protection in the droplet zone.



Linda Gail Jodi Sue
FRIENDLY SERVICE

**BIGGEST
CATALOG
FREE!**

JUST
CALL
800
328-9280

**DENNIS
KIRK.**



HS-210 TUBE/TUBELESS

110/90H18	FRONT	\$46.00
90/90H19	FRONT	42.50
100/90H19	FRONT	45.50
120/90H16	REAR	44.50
130/90H16	REAR	56.00
140/90H16	REAR	58.00
130/90H17	REAR	56.50
120/90H18	REAR	53.00
130/90H18	REAR	57.00

GS-11 TUBE-TYPE

325H19	FRONT	\$34.00
350H19	FRONT	36.00
90/90H19	FRONT	34.00
100/90H19	FRONT	40.00
460S16	REAR	32.00
120/90S16	REAR	32.50
130/90H16	REAR	53.00
110/90S17	REAR	33.00
450H17	REAR	54.00
510H17	REAR	38.50
350S18	REAR	33.00
375H18	REAR	37.00
400H18	REAR	39.00
510H18	REAR	40.50

DUNLOP

K291-T TOURING ELITE

MT90H16	REAR	\$76.75
MU90H16	REAR	83.75
MT90H17	REAR	72.75
MP90H18	REAR	67.75
MR90H18	FRONT	66.75
MM90H19	FRONT	61.75

K391-T SPORT ELITE

120/90V16	REAR	\$60.75
130/90V16	REAR	68.75
130/90V17	REAR	66.75
110/90V18	REAR	55.75
120/90V18	REAR	62.75
130/90V18	REAR	69.75
100/90V19	REAR	56.75
100/90V16	FRONT	57.75
120/80V16	FRONT	57.75
100/90V18	FR-RIB	42.75
110/90V18	FRONT	55.75
100/90V19	FR-RIB	56.75
100/90V19	FRONT	56.75

*ALL TIRES TUBE/TUBELESS

**WE ALSO STOCK
METZELER, YOKOHAMA
MICHELIN and AVON**



CLYMER
Cycle
Repair
Manual
ALL BIKES
Sugg. Retail \$11.95
\$10.50

ANCRA
TIE DOWNS



Sugg. Retail \$14.95 **\$12.50**

over
5000
items
228
pages



DENNIS KIRK.
FREE

Continental

K112 TWINS

MT90H16	REAR	\$61.75
450H17	REAR	57.75
350H18	REAR	48.75
400H18	REAR	51.75
425/85H18	REAR	53.75
120/90H18	REAR	53.75

RB-2 TWINS

325H18	FRONT	\$41.75
350H18	FRONT	46.75
325H19	FRONT	47.75
350H19	FRONT	49.75

TK44 SUPERTWINS

120/90V16	REAR	\$63.75
130/90V16	REAR	75.75
130/90V16	RWL	84.75
130/90V17	REAR	70.75
130/90V17	RWL	82.75
400V18	REAR	63.75
425/85V18	REAR	65.75
130/90V18	REAR	65.75

TK22 SUPERTWINS

110/90V18	FRONT	\$56.75
325V19	FRONT	57.75
350V19	FRONT	60.75
350V19	RWL	69.75
110/90V19	FRONT	60.75

*ALL TIRES TUBE/TUBELESS

BRIDGESTONE

MAG MOPUS-FRONT

100/90H18	BW	\$46.75
110/90H18	BW	49.75
110/90H18	RWL	51.75
120/90H18	RWL	54.75
90/90H19	BW	44.75
90/90H19	RWL	46.75
100/90H19	BW	46.75
100/90H19	RWL	49.75
110/90H19	BW	49.75
110/90H19	RWL	51.75

MAG MOPUS-REAR

130/90H16	BW	\$51.75
130/90H16	RWL	53.75
140/90H16	RWL	59.75
130/90H17	BW	53.75
130/90H17	RWL	56.75
110/90H18	BW	51.75
425/85H18	BW	51.75
120/90H18	BW	53.75
130/90H18	BW	56.75
130/90H18	RWL	59.75

*ALL TIRES TUBE/TUBELESS

KRYPTONITE LOCK



\$46.95
\$34.50

DryRider
Mens or Ladies
Yellow 2-piece
\$22.50
other styles also
available



DERALE
OIL COOLERS



\$74.50

TRACY



ALL MODELS IN STOCK
including
STILETTO & VORTEX

INTERPART
Mulholland
SHOCKS
from \$94.00/pr.

DYNAL IGNITION



\$119.50 **\$84.50**
FREE CATALOG
over 5000 items
PRICES GUARANTEED



MXL
BOOTS
\$149.95
\$79.50
SCOTT
BOOTS
\$219.95
\$79.50
Prices include liners!

**FREE FREIGHT
ON ALL ORDERS**



CHAIN
EK TK
D.I.D.
TSUBAKI
(cut to length)
Call for prices!

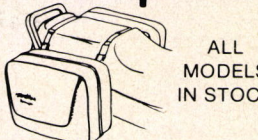
**OK TO CALL
FREE!**

ATV TIRES NANKANG
KNOBBY or
CHEVRON



55.95
FROM
\$27.50
ASK ABOUT
WOOLY BOOGER
BUCK SHOT MUDDER
BIG AL'S TRACKER
18 pages ATV parts in catalog

eclipse



ALL
MODELS
IN STOCK
BAGMAN

Prestolite
Firefly
Headlight
Modulators
for safer daylight
riding



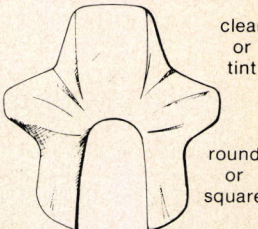
\$59.95
\$19.50

Vetter



FIBER
100
ALL MODELS IN STOCK
including
FAIRINGS & ACCESSORIES

TOURING SHIELD



clear
or
tint
round
or
square
Standard \$4.50 **\$49.50**
Long \$4.95 **\$59.50**

KRAUSER

Star Set \$409.95 **\$269.50**
(40 liters)
Starlet Set \$269.95 **\$179.50**
(25 liters)
Adj. Backrest **\$59.50**
Hardware included. Excellent
prices on trunks, accessories
and parts.



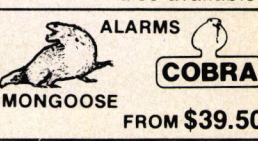
GLOVES \$14.50



**QUARTZ
HALOGEN
BULB
P43T
TYPE**
Sugg. Retail \$11.95
\$5.50

CONNECTICUT

CYCLE
LUGGAGE
RACK AND
MOUNTING
\$79.95 \$34.50
Backrest and sissy bars
also available.



ALARMS
COBRA
MONGOOSE
FROM **\$39.50**



Grips
GRAB ON
Sugg. Retail \$9.95 **\$5.00**

BELL.

**BIGGEST STOCK
IN USA**

NOVO

SIMPSON

SHOEI

NOIAN



CALL FOR
SUPER
PRICES

CALL FREE FOR CATALOG

800-328-9280

IN MN 800-652-9060 IN ALASKA & HAWAII 800-328-1788



OR WE'LL GLADLY SHIP C.O.D.

NOW OPEN
24 HOURS A DAY
7 DAYS A WEEK
955 S. Field Ave. Rush City, MN 55069

**DENNIS
KIRK.**

SPORT LINES

Cycle Guide's True Tales of Racecourses, Dark Horses and Machines at Speed

BY DAIN GINGERELLI

Winners & Losers: 1984

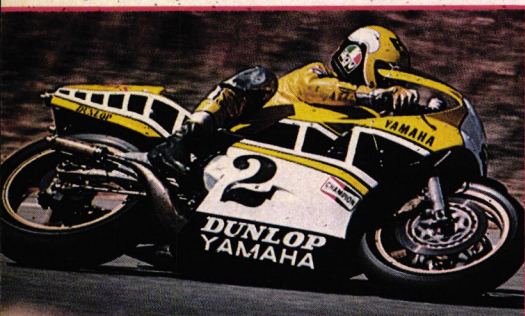
He who laps first, laps last.



© 1985 TOM RILES



© 1985 DAVID DEWHURST



© 1985 DAVID DEWHURST

1984 was a memorable year for racing, if for no other reason than Kenny Roberts' retirement from motorcycle competition. A career that included three world titles, two AMA Grand National championships and countless race records ended on a hot July afternoon at Laguna Seca Raceway. An era passed into racing history.

Roberts' farewell might have captured the bulk of the headlines, but it wasn't the only milestone the year had to offer. Another racing era ended in 1984, this one in AMA flattracking, where American Honda finally reversed the order on Harley-Davidson, and won the Manufacturer and Rider Championships. Ricky Graham and Bubba Shobert



© 1985 SPORT GRAPHICS, JEFF FISHER



© 1985 DAVID DEWHURST



© 1985 TOM RILES



© 1985 TOM RILES

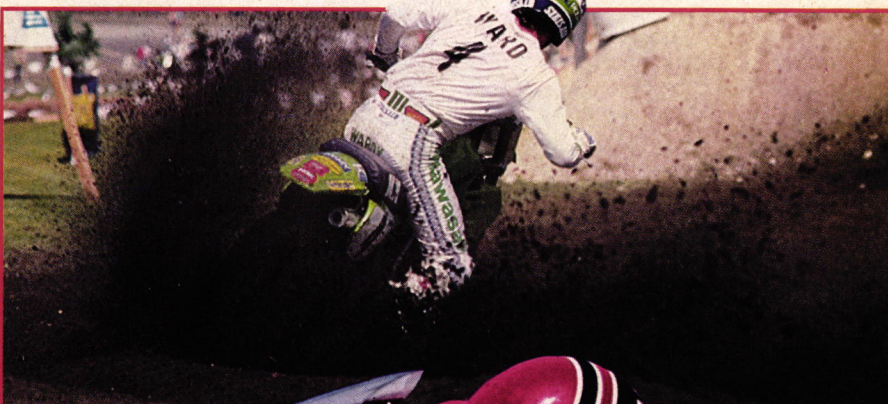
swept 1-2, making 1985 the first year since 1976 that a Harley-Davidson will not wear the Number One Plate.

But while Honda cleaned house on the flattrack front last year, its hold on motocross racing slipped. Even though defending AMA Grand National motocross champ David Bailey had a superb season in the Open class, the established order was rocked by Kawasaki and Yamaha: Jeff Ward brought Kawasaki its first AMA MX title since 1976, winning the 125 class, while Yamaha's Rick Johnson put his modified-production YZ250L ahead of all the factory 250s. With results like Johnson's, Yamaha's decision to run production-based machinery might well rewrite the book on

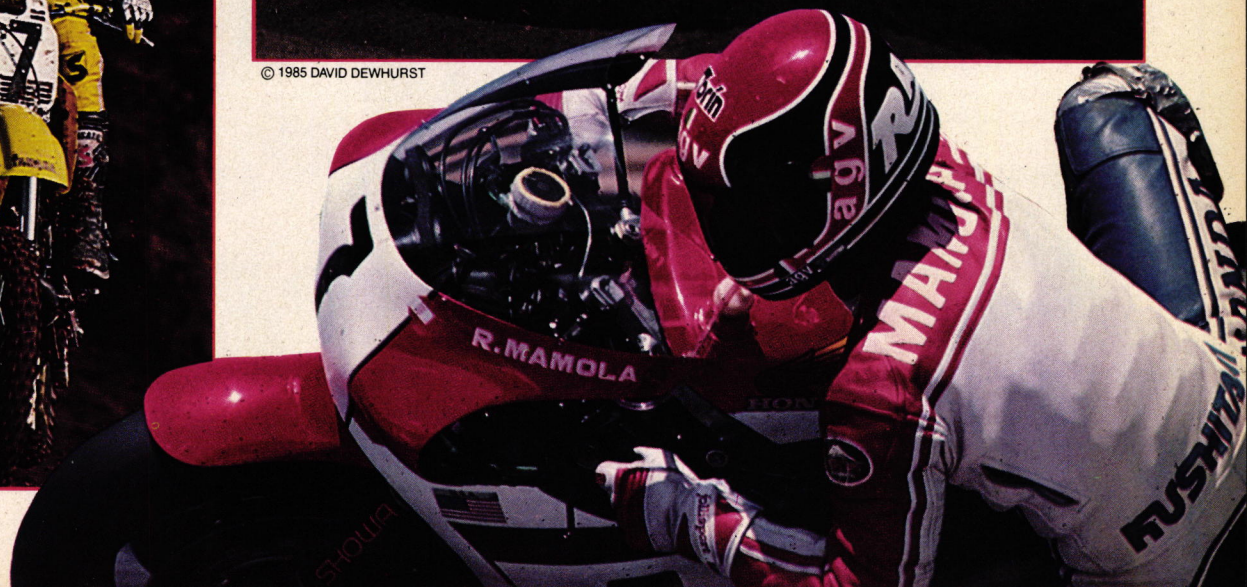
Continued



© 1985 TOM RILES



© 1985 DAVID DEWHURST





© 1985 DAVID DEWHURST

Jeff Ward flew to 125cc title*Kawasaki's cream rises to the top.*

winning in American professional motocross.

Roadracing, too, had its anomalies: While Europeans spoke of how the American flattrackers' brash, aggressive style of riding had shaken Europe for the past two years, it was the smooth, methodical brilliance of ex-circle-tracker Eddie Lawson that won him the 500cc World Championship. And Randy Mamola discovered that being a privateer in the Grand Prix circus isn't so bad; he finished second in this year's GP chase on a privately entered Honda—equalling his best record as a factory Suzuki racer. Flattrack specialist Bubba Shobert made the transition from dirt to tarmac by winning a Camel Pro Series roadrace, and European roadracers made subtle inquiries about entering American flattrack races to hone their pavement skills. Against this background of reversals, only Mike Baldwin's successful (and practically unchallenged) defense of his AMA Formula 1 title—and Fred Merkel's win in the Superbike championship—fulfilled early predictions about American roadracing.

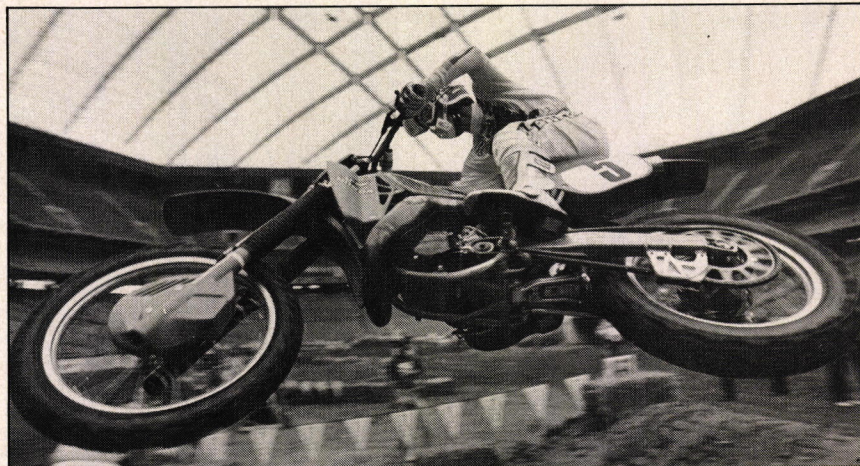
All told, 1984 had far more to distinguish it than Roberts' retirement, and was a season in which the unexpected was commonplace. That situation could well spill over into the 1985 season, too. So settle back with a short recap; we're going to take a look at the events and personalities that made 1984 what it was: unforgettable. —Dain Gingerelli



© 1985 TOM RILES

Yamaha's Rick Johnson won the 250 class Assemblyline championship.

The Highs and Lows of '84



© 1985 DAVID DEWHURST

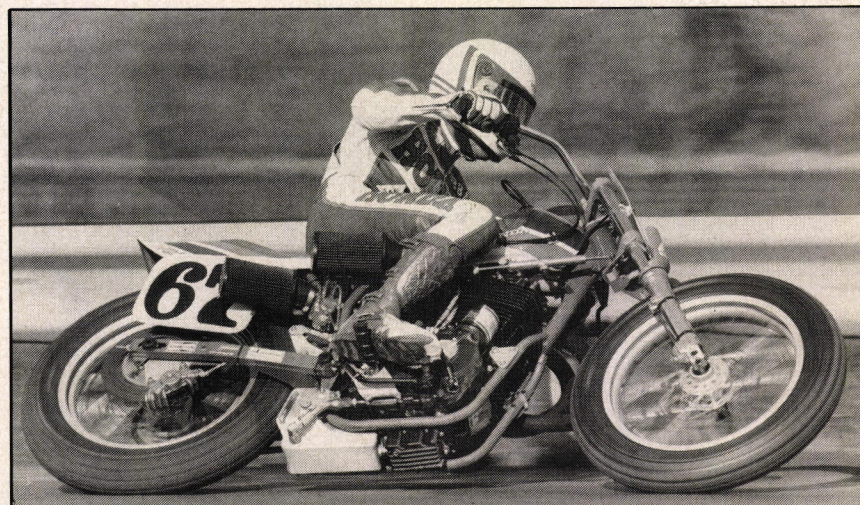
Honda's Johnny O'Mara got an early points lead and never lost it in Supercross*The Johnny O Show was the main event at indoor events for 1984.*

- Balance of power: While the AMA and InSport were disputing who would control professional motocross racing in America, the manufacturers were scrambling to win class championships. In the end, Kawasaki walked off with the AMA 125cc title, while Yamaha claimed the 250cc Championship, and Honda took the Open class. And with Honda's Johnny O'Mara winning the InSport Wrangler Super Series, Suzuki was the only Japanese bike manufacturer left without a wall plaque commemorating a 1984 championship.
- And that's no BS: Bubba Shobert returned to the Camel Pro Series with a vengeance following his mandatory six-race suspension, setting a record for AMA Class C racing: He placed second seven times, and won four races, including the Mid-Ohio roadrace. Shobert finished the season as runner-up—by one

point—to Honda teammate Ricky Graham. Had it not been for the forced, six-race hiatus, Shobert surely would be Grand National Champion.

- OCIR and out: The lights went out at Orange County International Raceway when that dragstrip closed last year. The effects of the closure extended far beyond Southern California, because the track was used by nearly every U.S.-based motorcycle and automotive magazine for testing.

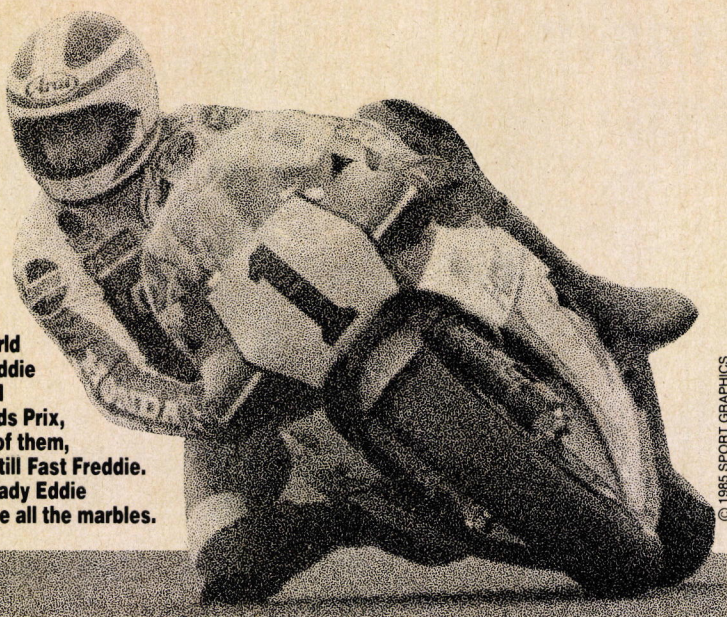
- The man who would be King: Yamaha's Eddie Lawson won roadracing's 500cc World Championship with consistent results, and proved in the process that you don't necessarily have to be fastest in every turn to be the best overall. Other notable championships that Steady Eddie has won over the years include two AMA Formula 2 titles and a pair of AMA Superbike



© 1985 TOM RILES

Bubba Shobert came back after a suspension to finish second in points*Dominating the racing, but not the Camel Pro Series Championship.*

Defending World Champion Freddie Spencer raced only five Grands Prix, but won four of them, proving he's still Fast Freddie. But it was Steady Eddie who took home all the marbles.



championships.

• The man who would beat King: While Lawson took the crown away from defending World Champion Freddie Spencer, it was Fast Freddie who was usually the faster of the two Americans on the racetrack. After injuring himself at the season's first Grand Prix in South Africa, Fast Freddie came back to face Steady Eddie five times, and won four of their Grand Prix confrontations.

• Veni, Vidi, Vici—again: The United States Motocross and Trophee des Nations team went to Europe and won again. Jeff Ward and Broc Glover were the big stars in the Motocross (250 class), placing 1-2 respectively in both motos, while it was a group effort of Ward, David Bailey, Rick Johnson and Johnny O'Mara that was responsible for winning the Trophee (Open class). That's five in a row for the U.S.



KTM saw gold with Heinz Kinigadner

Not all the world has gone Japanese.

• Trail break: Shortly after announcing his retirement from motorcycle competition, Kenny Roberts broke his leg while trailbike riding.

• Chris Carr, the new star: Junior-ranked AMA racer Chris Carr displayed his talents this year on the National trail, winning all but one Camel Pro Series Junior race. Naturally, Carr will be an expert for 1985, much to the relief of the other Juniors.

• Junior talent: While Carr displayed the right stuff last year, most of the other Junior riders were busy falling and bumping into one another on the racetrack. In the end, the Junior racing was abysmal, and, besides making most National programs look bad, prolonged the events while the Junior carnage was cleared from the track.

• Cunningham comes back: Husqvarna enduro rider Terry Cunningham beat the odds, and returned to competition following a badly broken leg in 1983. Not only did the 1982 National Enduro Champion race again, but he also came back to win his second AMA National Enduro Championship.

• KTM returns: Austrian motocross rider Heinz Kinigadner brought the 250cc Motocross World Championship back to KTM this year. Kinigadner's win was the first motocross Grand Prix championship won by a European manufacturer since 1978.

• Back to Belgium: Andre Malherbe won his third 500cc Motocross World Championship, in the process returning the trophy to Honda.

• Folly of youth: When Ron Lechien won the United States Grand Prix at Unadilla last July, he became the youngest rider ever to win a GP. Lechien was 17 at the time.

—Dain Gingerelli

MARZOCCHI

STREET SMART!



Available to bolt on popular street bikes, Marzocchi Strada gas shocks give you the dampening and ride control that the factory forgot. Total separation of gas and oil eliminates emulsification, the main cause of suspension fade. Strada shocks have lightweight aluminum bodies and are completely rebuildable. Available for most models of BMW, Ducati, Honda, Kawasaki, Laverda, Moto Guzzi, Moto Morini, Suzuki, and Yamaha.

List price \$159 per pair complete with springs, preload adjuster, and service manual.

CALL TOLL FREE

(800) 523-2522. In Pa.

call (215) 672-9100



COSMOPOLITAN MOTORS
HATBORO, PA 19040

MOTOR- PSYCHED?

**Make It Pay
With A Career In
MOTORCYCLE
MECHANICS**

- Technician Training
- Dealership Management
- Parts Management
- Performance Tuning
- Factory Endorsed Program

CALL TODAY TOLL FREE
1-800-528-7995

Motorcycle Mechanics Institute

2844 W. Deer Valley Rd., Phoenix, AZ 85027
(602) 869-9644 CG

☐ V.A. Info ☐ Financial Aid Info

Name _____

Address _____

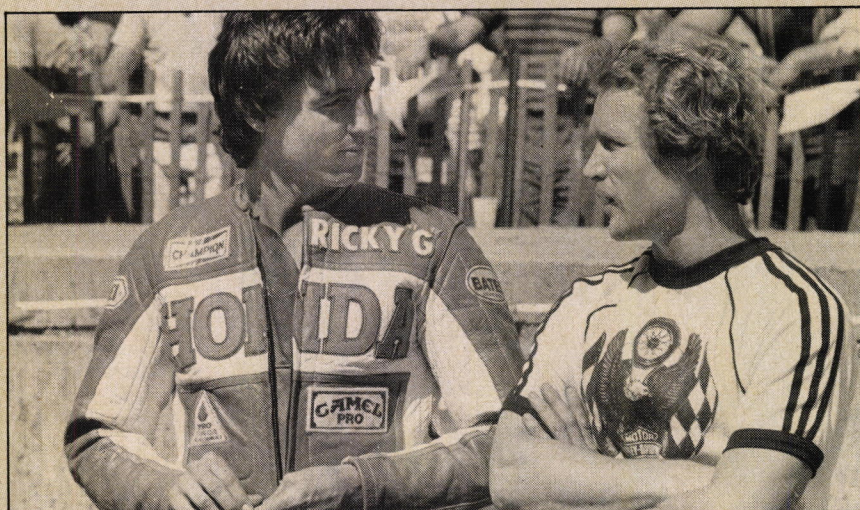
City _____ State _____ Zip _____

Phone (____) _____ Age _____

Continued

"They Said It—1984"

PHOTOGRAPHY © 1985 TOM RILES



Ricky Graham and Randy Goss discuss the War of '84

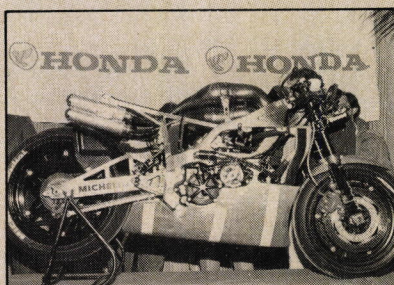
Perhaps Goss gave a welcoming speech when he shouldn't have.

- Goss understatement: When defending Camel Pro Series Champion Randy Goss was a guest on Roxy Rockwood's annual Daytona Cycle Week radio show, the Harley-Davidson rider was asked how he felt about American Honda's effort to take his No. 1 plate. Goss replied, "I'd just like to welcome Honda to the competition." Honda and Ricky Graham took the welcome to heart—and took home Goss' plate, too.

- A bald win: During that same week, AMA Formula 1 Champion Mike Baldwin was asked about his front-row qualifying position for the 200. He said, "I just want to see the green flag when it drops; that's the most important thing." Considering Baldwin's record at the beach, most roadrace observers think he should concentrate more on seeing the checkered flag.

- Talk of the town: It was at Daytona, too, that Honda first raced its much-talked-about NSR500 vee-four. Naturally, there were plenty of questions about the bike. George Vukovich, Spencer's mechanic and the man who had to change the tiny sparkplugs, along with myriad other chores, said about the NSR's complexity: "It's a little hard to work on." Roadrace team manager Udo Gietl compared the NSR to the NS500, the bike it replaced: "It's slightly faster." And finally, the man who sat in the NSR's saddle for 200 miles, Freddie Spencer: "It's easier to stay with the Yamahas (OW69 Daytona Specials) with this bike." Apparently, it wasn't easy enough; Spencer finished second, 83 seconds behind Roberts' OW.

- Piston broke: While preparing for the upcoming 1984 GP season, Barry



The NSR500 proved too complex for GPs

Spencer often preferred the triple.

Sheene practiced sparingly for the first race at South Africa. The race budget was obviously tight for Sheene, the privateer, as evidenced by his pre-season comments in an interview for "Motorcycle News." The former two-time world champion explained the abbreviated test sessions on his 500cc Suzuki square-four by noting: "I can't do too much (practice), because we have to save the pistons for South Africa."

- Strip tease: Wrangler Wear spokesman Tom Mueller hit the nail on the head last year when he said, "The big-money clothes deals are disappearing." At the end of the 1984 InSport motocross season, Wrangler Wear, a major sponsor of professional motocross racing in this country for the past two years, took its clothes money off the line, leaving the sport hanging, at least temporarily, for sponsorship.

- Roger DeCoster's a 10: Bo Derek has nothing on five-time world champion Roger DeCoster. His most recent protégé, two-time AMA Grand National Motocross Champion David Bailey, credits much of his success to DeCoster's



David Bailey gave DeCoster the thumbs-up

Hitching a ride with the best.

tutelage. Bailey said of DeCoster's chassis-tuning and managerial abilities: "Usually he's right about making changes to the bikes—usually 10 out of 10 times, anyway."

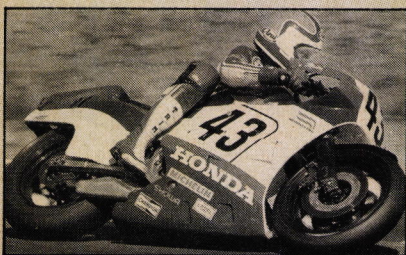
- Money can't buy love: Although it's basically agreed upon that love can't be bought, other things can be. And when American Honda rolled into the AMA Camel Pro Series pits several years ago, people predicted that it would only be a matter of time before Big Red bought its way into the Big One. But American Honda Research and Development Manager Udo Gietl felt otherwise, and said before the beginning of the 1984 season: "I don't think money will win that series (Camel Pro). Years of fine-tuning are necessary to catch up with Harley-Davidson, which has been flattacking for more than 30 years."

- Rob to the rescue: American Honda got some additional years of experience when former Kawasaki Superbike-tuner Rob Muzzi signed up to work on the NS750 engine program. Ricky Graham, Honda's new rider, was fully aware of Muzzi's talent for extracting horsepower from four-stroke engines, and said last March: "With Rob (working) on the motors, I think we'll see some improvement." That prediction turned out to be something of an understatement: Graham and teammate Bubba Shobert finished 1-2 in the Camel Pro Series.

- Good enough for government work: When the AMA approved Department of Transportation-certified helmets for use in AMA professional competition, Bill Boyce, AMA's director of professional racing, said, "We chose the DOT rule this year because it is backed by the

government, which requires quality—and quantity—control."

- Daytona surprise: Before race czar Bill France ever decided to run the Superbike race as his main event for 1985, American Honda's Udo Gietl made this prediction about the upcoming year: "In '85 we'll regroup. The 500 two-stroke will dominate." Maybe in '86.
- Happy silver anniversary, Honda: American Honda got a 25th anniversary present when Team Honda rider Bubba



After a faulty start at Daytona...

Mike Baldwin won his fourth F1 title.

Shobert won the San Jose Shorttrack and Mile races, May 5 and 6. His Mile win was the first time in 25 tries that a Harley-Davidson XR750 hadn't finished first at San Jose. The finish led one pro-Harley spectator to say after the race, "Well, once every 25 years might be all right." Shobert and his Honda NS750 didn't oblige, however, and won the September 16 San Jose Mile, too.

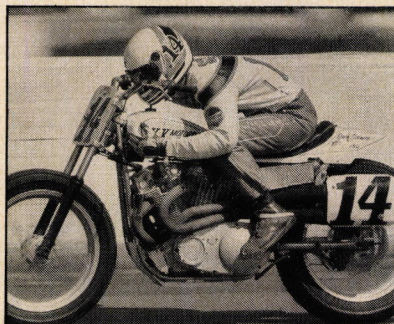
- Just like the champ: 1983 AMA Superbike Champion Wayne Rainey made a smooth transition to Grand Prix racing, when he joined Kenny Roberts' Team Marlboro. Rainey practically followed in his mentor's footsteps, too, especially when it came to bump-starting his TZ250L for each race. Like King Kenny, Rainey usually was one of the last riders off the line for a GP. Before the GP season got underway, Rainey said, "I've been running my butt off practicing for the bump-starts." Apparently, that's an overstatement, because the secretaries at Kawasaki still refer to him as "Cheeks." And they're not discussing his boyish grin, either.

- Give us a break: A press release from Creative Advertising Management Inc., for the October 6, Sacramento Mile, started off with the following: "The championship hopes of Team Honda were brightened last Saturday when defending Camel Pro Series Champion and Harley rider Randy Goss broke his leg at the San Jose Mile." We can only hope this was a case of not saying what was meant, and not meaning what was said. Creative Advertising Management, by the way, represented the race promoter, not American Honda.

—Dain Gingerelli

Pit Bits

- Tapped out on Stroh's: Look for more than just the smiling mugs of the winners in victory circle at the Camel Pro Series Mile races this year. Chances are you'll see some beer mugs sporting the Stroh's label there, too. Stroh's Brewery will be sponsoring several AMA Mile races this year, and if everything goes down smoothly with Stroh's, there's a chance further race support could be on tap for AMA Grand National racing.



Mile specialist Hank Scott drafts a beer

A Mile for a Stroh's and a Camel.

- More Moran: United States Speedway Champion Kelly Moran has successfully defended his title. On October 6, at the Costa Mesa Fairgrounds (Costa Mesa, California), he finished the night with 14 points out of a possible 15. His only loss was to Bobby Schwartz in the third four-lap heat of the night. Schwartz finished second in the National Championship, while John Sandona was third.

- The Yosh quest: Like many race teams, Yoshimura R&D is looking for a sponsor for its Superbike effort. While finding a sponsor never is easy, Yoshimura's problems are doubly compounded by the fact that *this* race team lacks both a racebike and a rider. Sources at Yoshimura say the race effort is on hold, awaiting homologation of Suzuki's new GSX-R750. In the meantime, the team is auditioning riders on the air-cooled GS750 that Wes Cooley won with at Sears Point last August. According to team manager Suehiro Watanabe, Yoshimura wants a "young, hungry rider" to spearhead the 1985 Superbike team.

- TZ250M to the guillotine: Contrary to early rumors, the new Yamaha TZ250 roadracer *will* have a power valve. However, replacing the barrel-type valve of the J, K and L series is a guillotine-type valve in the exhaust port. The M-model is reported to weigh about five pounds less than the TZ250L, and produce two or three more horsepower. According to Yamaha Race Director Ken Clark, only 10 250Ms will be imported for U.S. sale.

THE SPEED OF LIGHT!



- The finest in light weight high style design
- Five distinctive models for street and off-road
- All Simpson helmets meet or exceed Snell 80 and DOT
- Recognized world-wide as the style and performance leader

Model 32

SIMPSON

213-320-7231
22630 S. Normandie Ave.
Torrance, CA 90502



RIDE AWARE. SHOW YOU CARE.

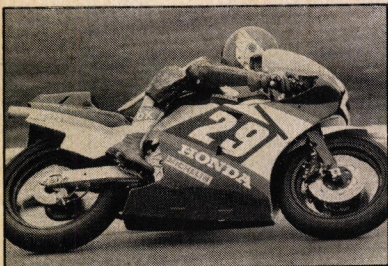
MOTORCYCLE INDUSTRY COUNCIL, INC. MIC

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION			
1. TITLE OF PUBLICATION		2. PUBLICATION NO.	3. DATE OF FILING
CYCLES GUIDE		11/25/84	
4. FREQUENCY OF ISSUE	5. NO. OF COPIES PUBLISHED THIS YEAR	ANNUAL SUBSCRIPTION PRICE	
MONTHLY	11	\$1.98	
6. COMPLETE MAILING ADDRESS OF KNOWN OFFICE OF PUBLICATION (Street, City, County, State and ZIP Code) (Not printer)			
80916 Higgins Court, Torrance, CA 90501			
7. COMPLETE MAILING ADDRESS OF THE HEADQUARTERS OF GENERAL BUSINESS OFFICES OF THE PUBLISHER (Not printer)			
Same as #6			
8. FULL NAMES AND COMPLETE MAILING ADDRESSES OF PUBLISHER, EDITOR, AND MANAGING EDITOR (Not name MUST NOT be blank)			
PUBLISHER (Name and Complete Mailing Address): Peter E. Hoenigsmann -- 80916 Higgins Court, Torrance, CA 90501			
EDITOR (Name and Complete Mailing Address): Lawrence M. Jorke -- 80916 Higgins Court, Torrance, CA 90501			
MANAGING EDITOR (Name and Complete Mailing Address): James H. Star -- 80916 Higgins Court, Torrance, CA 90501			
9. OWNERS (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given. If the publication is published by a sole proprietorship, its name and address must be stated. (Not name MUST NOT be blank)			
FULL NAME COMPLETE MAILING ADDRESS			
CYCLES GUIDE PUBLICATIONS 80916 Higgins Court, Torrance, CA 90501			
George M. Dougherty 770 Lexington Ave., New York, NY 10017			
10. KNOWN NONHOLDERS, MORTGAGEES, AND OTHER SECURITY HOLDERS OWNING OR HOLDING 1 PERCENT OR MORE OF TOTAL AMOUNT OF STOCK, MORTGAGES OR OTHER SECURITIES (If none or none, so state)			
FULL NAME COMPLETE MAILING ADDRESS			
FOR COMPLETION BY NONPROFIT ORGANIZATIONS AUTHORIZED BY MAIL AT SPECIAL RATES (See item #12) (Check one) The purpose, function, and nonprofit status of this organization and the exempt status for Federal income tax purposes (Check one)			
11. HAS NOT CHANGED DURING PRECEDING 12 MONTHS 12. HAS CHANGED DURING PRECEDING 12 MONTHS (If changed, publisher must submit explanation of change with this statement)			
13. EXTENT AND NATURE OF CIRCULATION			
A. TOTAL NO. COPIES (Print Press Run)		B. TOTAL NO. COPIES EACH ISSUE DURING PRECEDING 12 MONTHS	
279,428		279,428	
C. PAID CIRCULATION		D. FREE DISTRIBUTION BY MAIL, CARRIER OR OTHER MEANS	
1. Sales through dealers and carriers, street vendors and counter sales		SAMPLES, COMPLIMENTARY, AND OTHER FREE COPIES	
76,000		8,000	
2. Mail subscription		173,428	
244,000		244,000	
E. TOTAL PAID CIRCULATION (Sum of C and D)		F. TOTAL FREE DISTRIBUTION (Sum of D and E)	
244,000		244,000	
G. COPIES NOT DISTRIBUTED		H. OFFICE USE, NOT FOR CIRCULATION, quoted after printing	
1. Office use, not for circulation, quoted after printing		2. Return from News Service	
2,222		219,206	
G. TOTAL (Sum of G, H, and I) and 2. should equal total press run shown in A		H. TOTAL (Sum of H, I, and J) and 2. should equal total press run shown in A	
279,428		279,428	
14. I certify that the statements made by me above are correct and complete			
SIGNATURE AND TITLE OF EDITOR, PUBLISHER, BUSINESS MANAGER, OR OWNER		SIGNATURE AND TITLE OF EDITOR, PUBLISHER, BUSINESS MANAGER, OR OWNER	
Anthony J. Jorke, Editor		Anthony J. Jorke, Editor	

Continued

Pit Bits

© 1985 TOM RILES



Honda still isn't happy with its RS250R

That's why it's redesigned for 1985.

- **Honda's 250 roadracer:** While Yamaha was busy putting its 250 head in the guillotine—or vice versa—Honda put its entire bike on the block for 1985. The new RS250R was introduced last October, and features Honda's ATAC variable-volume exhaust system. The bike is claimed to produce 69 horsepower at 11,750 rpm.
- **Strictly Continental:** Continental Tire Co. joined the ranks of several other tire manufacturers with a pair of DOT-approved tires designed for production racing. According to sources at Continental, the TKH11 front and TKH12 rear tires will be available on a limited basis, and will be supplied to select race teams. No sizes or prices were released, but production should begin shortly after the first of the year.



A sneak-peak at Continental's race tires

Not available in stores.

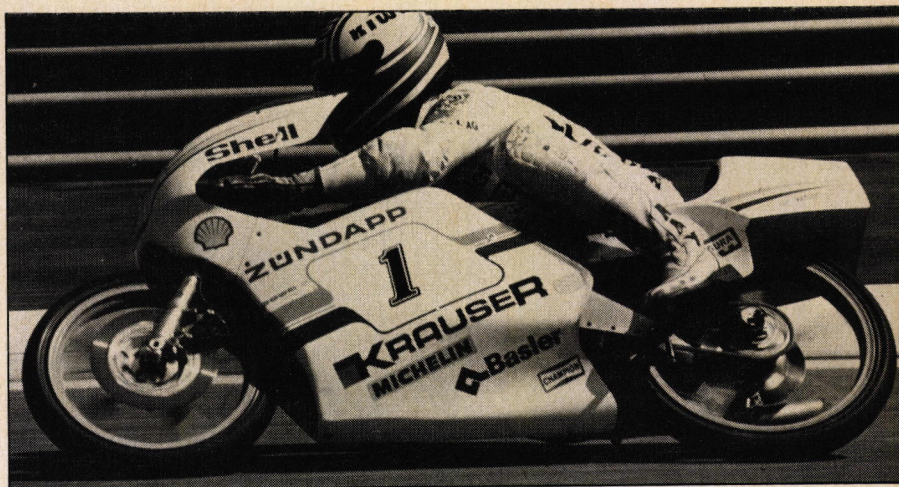
- **Graham one:** Honda's Ricky Graham won the Camel Pro Series, and will carry the No. 1 plate for '85. Graham clinched the championship with a 13th-place finish at the season's final race, the Stroh's Springfield Mile. The two CPS points from that finish were all he needed to edge out teammate Bubba Shobert, who finished second in the race, and in the standings. Ted Boody won the Springfield Mile on a privately entered Honda RS750.

—Dain Gingerelli

ROADRACING:

Tiddlers No More

The GP class of the Eighties.



PHOTOGRAPHY © 1985 RICH CHENET

Former 50cc World Champion Stefan Dorflinger stepped up to win the 80cc title

He Zundapped the little guys one more time.

- **Tiddler racing finally came of age in 1984.** Last year's race season, you see, was the first to be run under the FIM's new rules for GP roadracing's smallest class, frequently referred to as the "tiddler class." For '84, the upper limit of engine displacement increased from 50cc to 80cc.

The FIM's primary goal for the new displacement limit was to bring the class's structure closer to what the small-bike world market favors, and that means 80cc engines, rather than 50cc. The rule change also was made to attract the Japanese manufacturers to small-bore racing, which recently has been supported only by the smaller European factories, including Derbi (Spain), Kreidler (West Germany), Zundapp (West Germany) and most recently, Huvo-Casal (Holland).

But none of the Japanese Big Four has expressed an interest in racing or supporting 80cc teams of their own. Their yen for racing, it seems, favors the 500cc class, where world attention, including that of the lucrative U.S. market, is focused. That didn't diminish the 80s' popularity in Europe this season, however; the new untiddlers drew crowds at the GPs as large as the 500s did. The small bikes just went a little slower, that's all.

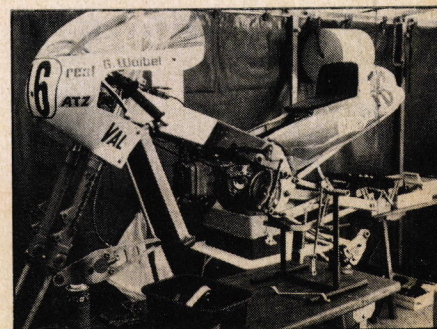
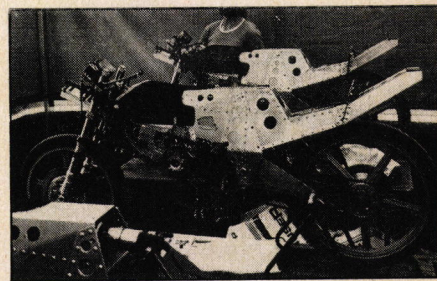
Still, the 80cc bikes perform admirably. Take, for instance, some of the top speeds clocked during the Austrian Grand Prix at Osterreich last May. Several of the front-running 80s, including the Zundapp ridden by former 50cc World Champion and 1984 80cc World Champion Stefan Dorflinger, tripped the radar beam at about 130 mph.

Those speeds didn't surprise the tiddler-fiddlers; they already had managed to coax nearly 20 horsepower from their 50cc en-

gines. The new larger-bore cylinders, though, allowed more transfer-port area, resulting in as much as 10 additional horsepower for the 80s. And because most of the teams continue to use the same lightweight, single-shock monocoque chassis as the 50cc bikes had, there's little or no additional weight to slow down the new un-tiddlers.

With speeds like that, the tiddlers in the FIM's smallest displacement class might gain a bit more respect. After all, when was the last time you saw a tiddler that could more than double the double nickel?

—Dain Gingerelli •



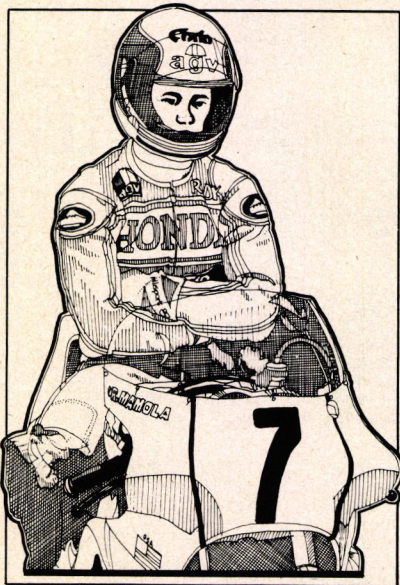
The 80s use monocoque frames, as did the 50s
Bigger engines, higher speeds.

LETTERS *Fast riders, Guzzi lawnmowers and Fat heads.*

MAN AND MACHINE

The letter from David Brochstein in your September 1984 issue prompted me to write this letter. He seemed upset because you printed two different E.T.s for the same bike. Too many riders think that because a bike is clocked at X seconds that it is "the fastest" or "the slowest," forgetting that the rider makes the difference. To prove a point: I occasionally borrow a friend's 1983 H-D Sportster and regularly blow away about 80 percent of all the FJ1100s, VF1000Fs, and any other superbikes on backroads. The reason is simply that I have done some motorcycle racing in the past and know the H-D's limitations and how to best take advantage of the bike. Some superbike owners get to the point of near fights because I listen to them shoot off their mouths about how their bike is "the fastest production bike in the world," and then beat them in a good backroad race. The bottom line is that Rider A might be able to do an 11-second quarter-mile on an FJ1100 and Rider B might not be able to break 14 seconds on the same bike. It's all in the rider.

Michael J. Gratis Sr.
Buzzards Bay, Maine
John Jay Gleason and Randy Mamola would certainly agree—ed.



COME AGAIN?

In reference to the "Setting It Right" article, by L.J.K. Setright, in the October 1984 issue, I only have the following comment: Huh?

When I finish reading your articles (as well as those from other motorcycle magazines), I'd like to be able to reflect

on what I just read to see if the article has pertinent data for my bikes, or me. I am reasonably sure that in future issues, when I see an article authored by Mr. Setright, I will simply pass it by. Who needs to feel like an idiot?

Don't get me wrong: I want, very much, to garner as much information from your magazine as possible. But, if the author is so hung up with trying to wow us with his technical knowledge, then I just don't need that. Please advise your contributors to cease and desist on the mental masturbation. It ain't necessary. Thanks.

John R. Greene
Simi Valley, California

VEE-TWIN LAWNBOY

As the owner of a 1984 Moto Guzzi Le Mans III, I feel obligated to comment on your riding impression of the Le Mans in the September 1984 issue. I can assure you that my Le Mans does not sound anything like my lawnmower with the engine running at idle. I would like to know what kind of vee-twin lawnmower engine your road testers have that sounds like a Moto Guzzi. When your magazine tests the latest Japanese two-stroke dirtbike, you don't say it sounds like a chain-saw. But when you get your hands on the latest Italian superbike and, oh yes, well, it sounds like a lawnmower. I suggest that if you cannot tell the difference in sound between a lawnmower and an exotic vee-twin Italian sportbike, you don't deserve to have your opinions put into print.

Michael Pisarcik
Riverdale, Georgia
The only ill-considered opinions we print are in the letters column—ed.

TRADE SECRETS

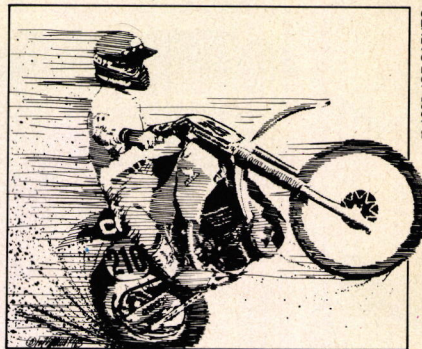
Regarding the editorial, "The Greatest Racing Story Never Told," in your September issue: It's no news that the New York Times and other dailies don't follow GP motorcycle road racing, so why don't you set an example?

None of the major motorcycle magazines, including CYCLE GUIDE, follows the pro racing scene with any consistency whatsoever. When was the last time a GP race was the cover story on any monthly motorcycle magazine, let alone Sports Illustrated?

As an example, look at AutoWeek's competition section. I realize it's easier to do with a weekly, but this section includes the standings for the driver and manufacturer's series, as well as the stories behind them.

Each race in itself could account for a short novel, so how about starting with a page each for world championship road racing, motocross and Camel Pro Series racing?

Roger Eckstine
White Plains, New York



© 1985 JOE SAPUTO

SHORTED SPORTS

The assistant managing editor at Sports Illustrated might have told the truth when he said he had not read two letters asking for more motorcycling coverage, but he did see at least one—mine. SI's "Year In Sports" issue unbelievably omitted the fact that four Americans dominated the 1983 500cc Roadracing World Championship. How often does that happen in any international sporting series? When I wrote and asked about SI's lack of coverage, I received the reply, "space limitations." Ridiculous. Space limitations didn't prevent SI from printing eight-year-old crash photos of Indianapolis winner Rick Mears. The fact that a so called "sports magazine" doesn't recognize the talent, dedication and competitive spirit of the American and international motorcycle athletes is a disgrace.

Marc E. Widdiss
Gay Head, Massachusetts

GLASS HOUSES

You guys have got to be kidding! You bemoan the lack of race coverage in newspapers, with which I heartily agree. But when I look for coverage of Laguna Seca, what do I find? Incomplete coverage of one (Superbike) event! What about Formula 1, Kenny Roberts' last race? Battle of the Twins? Formula 2? And all the other support events like the High-Mileage contest, Sidecars, Superbike School Challenge? There were 82,000 spectators there. This must deserve more coverage than one page with two pictures!

I guess it's like Roberts says, "Well, if

Continued

Competition Accessories Inc.

1944 U.S. 68 North, Xenia, Ohio 45385



Orders Only

Toll Free 1-800-543-3535

Ohio Orders Dial Toll FREE
1-800-252-3131 Orders Only

For Information on Availability -

Fit - Price - etc., Call 1-513-372-7607

FOR CUSTOMER SERVICE CALL 1-513-372-6621, 9-5

PHONE HOURS: Mon. thru Thurs. 9 a.m. - 7 p.m.

Fri., Sat., 9 a.m. - 5 p.m.; CLOSED SUNDAY

Mid-West's Motorcycling Headquarters

- We stock 1,001 Motorcycle Items
- We Will Usually Beat Any Price
Call Us Before You Pay Too Much
- We Do Not Play Pricing Games - These Prices
Are In Effect Until Our Next Printed Ad
- We Sell Most Name Brand Cycle Accessories
- We Have No Minimum Order
- We Have The Best Prices - Try Us!
- Ohio Residents - Please Add 5.5% Sales Tax.

COUNTER HOURS:

Mon., Tues., Thurs. 9 am - 7 pm; Fri., Sat. 9 am - 5 pm (Closed Wed. & Sun.)



We gladly ship C.O.D.
**FREE UPS Shipping in the 48
States to Your Door**
APO/FPO/AK/HI and Others
Add Freight

**FREE
FREIGHT**



VETTER

Windjammer, Lowers, Rooster
Quicksilver, Bullet, Sting
Ghost, Saddlebags, Tail Trunk
Ultra Sounds, Cruise Control
Interbike, Vetterlite
Fiber 100, 200, 300

VETTER WILL NOT SEND US
PRODUCT IF WE PRINT OUR SUPER
LOW PRICES. CALL US LAST & SAVE.

Vetter 24L Tank Bag Tan \$39.95
Vetter Fairsing Cover \$26.95

TIRE ACCESSORIES

Balance plus 8 oz. \$2.95
12 oz. \$3.95 16oz. \$4.79
Seal N Air \$4.95
Breezer \$7.50
6" Tire Iron \$2.50
9" Tire Iron \$4.50
Standard Tube \$5.95
Michelin Tube \$8.95
Continental or Metzeler Tube \$11.95

STOP & GO

TIRE REPAIR KITS

Tube Type \$22.50
Tubeless \$25.50
Deluxe (both) \$27.95

Quartz H/L \$22.95
100/55 Bulb \$13.50
60/55 Bulb \$5.95
100/90 Bulb \$16.95



XKMR-Radar Detector \$131.95



MARKLAND INDUSTRIES INC.

Super Brace \$59.95
Rider Backrest \$108.00
Driverboards \$157.95
Rear Safety System \$132.95
Int./Asp Bag Rails \$97.95
Int./Asp Trailer Hitch 80-83 \$66.00
Wraparound Windshield, Clear \$89.00
Wraparound Windshield, Tint. \$99.00
Super Price on all other items. CALL!

LUGGAGE RACK

w/adj. Backrest \$94.00



RB-2 Tube/Tubeless

325Hx18 Front \$40.50
350H x 18 \$44.50
325H x 19 \$45.50
350H x 19 \$47.50

K112 Tube/Tubeless

510 x 16 Rear \$57.50
450 x 17 \$55.50
350 x 18 \$47.50
400 x 18 \$50.50
425 x 18 \$51.50
120/90 x 18 \$52.50

SUPERTWINS

120/90 x 16 TK44 \$58.50
*130/90 x 16 \$64.50
*130/90 x 17 \$62.50
400 x 18 \$58.50
425/85 x 18 \$60.50
130/90 x 18 \$61.50
110/90 x 18 TK22 \$51.50
325 x 19 \$50.50
*350 x 19 \$51.50
*RWL Add \$10.00



K391S-Sport

120/90V-16 \$53.50
130/90V-16 \$59.50
*130/90V-17 \$58.50
*120/90V-18 \$55.50
*130/80V-18 \$61.50
140/80V-18 R Only \$78.50
100/90 V-18 Fr. Rib \$47.50
100/90V-19 Fr. Rib \$51.00
*100/90V-16 Front \$51.50
*120/80V-16 Front \$52.50
*110/90V-18 Fr/Rear \$50.50
*100/90V-19 Fr/Rear \$51.50
*R Compound Add \$10.00

K291T-Touring

MT90-16 \$63.50
MU90-16 RWL \$71.50
MT90-17 \$61.50
MP90-18 \$57.50
MR90-18 RWL Front \$59.50
MM90-19 \$50.50

K391S RWL

120/90V-16 Rear \$63.88
130/90V-16 \$69.88
130/90V-17 \$68.88
120/90V-18 \$65.88
130/90V-18 \$68.88
100/90V-18 Front Rib \$56.88
110/90V-18 Front Rib \$59.88
100/90V-19 Front Rib \$61.88

FOR OTHER SIZES AND BRANDS
CALL TOLL FREE.



G512 Rear "Mag Mopus"

*130/90H16 \$49.50
140/90 x 16 RWL \$57.50
*130/90H17 \$51.50
110/90H18 \$49.50
4.25/85H18 \$49.50
120/90H18 \$51.50
*130/90H18 \$54.50
L303P Frt. "Mag Mopus" \$44.50
100/90H18 \$47.50
*110/90H18 \$47.50
120/90 x 18 RWL \$52.50
*90/90H19 \$42.50
*100/90H19 \$44.50
*110/90H19 \$47.50
*RWL Add \$3.00



TOURMAX

*MU90x15 \$54.95
*MT90x16 \$61.95
*MU90x16 \$64.95
*MT90x17 \$59.95
*MP90x18 \$55.95
*MM90x19 \$49.95
*RWL Add \$5.00



REAR ME 77

130/90 x 16 TL \$74.88
* 450 x 17 \$67.88
130/90 x 17 TL \$70.88
* 400 x 18 \$63.88

FRONT ME 77 and ME 11

325 x 18 ME 11 \$45.88
+ *100/90 x 18 \$54.88
+ 110/90 x 18 TL \$63.88
* 325 x 19 ME 11 \$51.88
+ 350 x 19 TL \$62.88
110/90 x 19 ME 11 TL \$69.88
* Tubeless Add \$5.00
+ Sport Comp. Add \$10.00

REAR ME 99

+ 130/90 x 17 TL \$78.88
+ * 400 x 18 \$64.88
+ * 425/85 x 18 \$65.88
+ * 120/90 x 18 \$66.88
+ * 130/80 x 18 \$73.88
150/70 x 18 Sport TL \$98.88
* Tubeless Add \$5.00
+ Sport Comp. add \$10.00

ME 33 LASER

* *100/90 x 16 TL \$59.88
* *120/80 x 16 TL \$68.88
* *100/90 x 18 TL \$68.88
* *110/90 x 18 TL \$70.88
* * 325 x 19 TL \$69.88
* * 350 x 19 TL \$73.88
* * Sport Compound Add \$5.00
Knobbies Available...CALL!

Dry Rider

New 2 pc. Suit - Silver 300 \$66.50
New 1 pc. Suit - Silver 305 \$63.50
New 2 pc. Suit - Blk 295 \$61.50
1 pc. Suit - Blk 285 \$57.50
1 pc. Suit - Gold 275 \$41.50
2 pc. Suit Yel. or Org. 121 \$22.50
2 pc. Suit Blue or Yel. 112 \$37.50
*Boots \$5.00
*Hoods \$4.00
*Mitts \$4.00
*Specify suit number and color
TOTES BOOTS Slip On \$12.95

BagMan

Premier Saddlebags \$129.50
Saddlebags \$101.50
14L Tank Bag \$55.50
18L Tank Bag \$62.50
24L Tank Bag \$69.50
RACK/SEAT Bag \$41.50
Sissy Bar Bag \$29.95

INTERCOMS
PMC-2 \$43.50
PMC-3(FM) \$56.50
PRC-7 \$69.50
PRC-8(FM) \$74.50
PRC-9 \$78.50



Before ordering your helmet, please
have your head measurement ready.
Measure around head 1" above
eyebrows and across largest portion of
head in rear. If you have any ques-
tions, please call.

Star LTD \$131.50
Tour Star 2 \$118.50
Magnum LTD \$98.50
RT \$74.50
GT Royal \$178.50
Moto III \$114.50
Roadstar 2 \$104.50
M2 \$209.50



NAVA GP \$98.50
NAVA GT \$58.50
INTEGRAL 2 Air Control \$73.50
INTEGRAL 3 \$59.50
FIBERNET \$188.50
INTERCOM \$68.50



*Model 32 \$142.50
*Model 62 \$104.50
*Model 52 \$91.95
*Model 72 Open Face \$64.95
*Carbon Fiber add \$50.00



Astro Super Vent \$121.50
Superlight \$192.50
Ultra Light \$231.50
Signature \$126.50
Classic Open Snell '80 \$69.00
MXV \$99.00

"LAST CHANCE FOR CHRISTMAS" Accessory

MAXON HI Intercom

S.L. \$66.95

Our Price \$56.95

BEWARE OF RIP-OFFS

- 1) We are a legitimate dealership selling five popular makes of motorcycles and have been in business 25 years under the same name.
- 2) You are welcome at our counter any time. We would be glad to meet you personally and would be proud for you to SEE our store.
- 3) We feel our policies are above reproach. To receive a copy, please send a self-addressed stamped envelope.

See Opposite Page for Hours



Electric Vest.....	\$79.95
Tank Bag, blk, gray.....	\$63.95
Sport Pack, blk, gray.....	\$79.95
Saddlepacks I, blk, gray.....	\$169.95
Saddlepacks II, blk, gray.....	\$111.95
Saddlepacks III, black.....	\$79.95
Raincover Saddlepack.....	\$21.95
Raincover TB/TP.....	\$11.95
Tail Pack, blk, gray.....	\$47.95
Shoulder Strap/Luggage.....	\$9.00
Backpack Strap.....	\$9.00
Briefcase.....	\$47.95
Helmet Bra.....	\$11.00
Nightrider.....	\$6.25

SAMSONITE

3 Bag Set.....	\$239.00
2 Bag Set.....	\$189.00
Back Rest.....	\$30.00
Trunk.....	\$79.00
Available CB650, 750K71-76,	
CB900/1000, GL1000, 1100, KZ 650,	
750, 900, 1000, GT 750, GS 750,	
850, 1000, 1100, STD and L, XJ 650,	
XS 750, 850, 1100	

LOCKHART

Apple Warmers.....	\$14.95
500 Oil Coolers.....	\$73.95
600 Oil Coolers.....	\$124.95
700 Oil Coolers.....	\$89.95
Competition Cooler.....	\$149.95
Fast Glass Lowers.....	\$229.95



QA-1.....	\$66.50
Racing Cooler.....	\$135.50



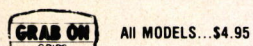
Telefix Brace.....	\$61.00
--------------------	---------



SOS.....	
New Priority Lite Plus.....	\$47.95
Priority Lite.....	\$23.95
New Pulsar Modulator.....	\$59.95
4 Way Flasher.....	\$10.95
Turn Signal Beeper.....	\$6.95
Vanda Cruise.....	\$22.95
Vista Cruise.....	\$10.95
Super Vista.....	\$24.95

CARB STIX II.....\$19.95

PRO CARB STIX.....\$24.95



GRAB ON Grips All MODELS.....\$4.95

ANCRA

Tiedowns.....\$12.49



PLEXIFAIRING III

CLEAR \$80.50.....	TINT \$84.50.....
Stripe Kit.....	\$12.95.....
Plexibag.....	\$19.95.....
Plexistar.....	
Clear \$61.50.....	Tink \$65.50.....
Deflector Screen.....	
*Clear \$31.50.....	Tint \$36.50.....
*Lexan add \$20.00.....	
Audio Cannon N5010.....	\$134.95.....



6917 H/L Cover.....	\$27.50.....
6920 A Lites.....	\$29.95.....
6910 Lites.....	\$44.95.....



Z100-Snell '80.....	\$124.88.....
Z100 Tri-Color.....	\$144.88.....
ER-7.....	\$96.50.....
TF 250.....	\$79.95.....
*FM2 Fairing, Blk, Wht.....	\$98.95.....
*FM3 Fairing, Blk, Wht.....	\$98.95.....
*FM5 Fairing, Blk, Wht.....	\$118.00.....
*Silver Add.....	\$10.00.....



CYCLE SOUND — COVER INCLUDED	
Std. Speaker Poly.....	\$69.00.....
Coaxial Speaker Poly.....	\$81.00.....
Invader Fairing.....	\$339.00.....



Lock K4MC.....	\$33.95.....
Lock Carrier, K4MC only.....	\$10.95.....
Lock K4FF.....	\$28.95.....

VANCE & HINES

Std. 4 into 1, Blk.....	\$198.00.....
Interceptor Superbike.....	\$239.00.....

KERKER

4 into 1 Std.....	\$166.50.....
K2, K2S, KR.....	\$174.50.....
Side Kicks.....	\$99.00.....



Slip On Mufflers.....	\$105.00.....
4 into 2 System.....	\$195.00.....
4 into 1 System.....	\$179.00.....
4 into 1 Black, New.....	\$119.00.....

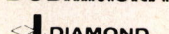


Chrome.....	\$201.00.....
Black.....	\$192.00.....
Racing System Black.....	\$218.00.....
Super Street.....	\$216.00.....

KRAUSER



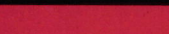
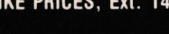
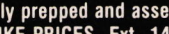
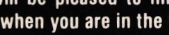
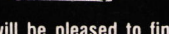
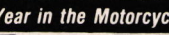
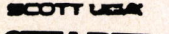
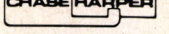
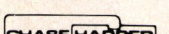
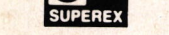
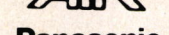
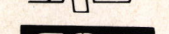
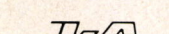
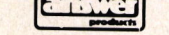
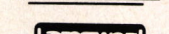
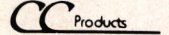
YOSHIMURA



GREER

O'NEAL

VANCE HINES



Competition Accessories Inc.

1944 U.S. 68 North, Xenia, Ohio 45385



Orders Only Toll Free 1-800-543-3535



Ohio Orders Dial Toll FREE

1-800-252-3131 Orders Only



For Information on Availability -

Fit - Price - etc., Call 1-513-372-7607

FOR CUSTOMER SERVICE CALL 1-513-372-6621, 9-5

ATTENTION: Don't be fooled by Super Low Prices on similar products. All of our items are First Line, Name Brands - Not Blems, Closeouts or Cheap Imitations. We advertise the make and name of our products; do others???



*Super G125 Dacron.....	\$46.95.....
*Super G100 Dacron.....	\$41.50.....
*Super G50 Dacron.....	\$35.50.....
*Super G45 Dacron.....	\$32.50.....
Protector PX125.....	\$40.50.....
Protector PX100.....	\$35.50.....
Protector PX50.....	\$31.50.....
Protector PX45.....	\$28.50.....
Fairing Cover X40.....	\$29.50.....
*Canvass Add.....	\$6.00.....

GA-ZEE-BO

MID RANGE EZ LINE

*Basic.....	\$29.50.....
*Half Dress.....	\$31.50.....
*Full Dress.....	\$33.50.....
*Super EZ Line Add.....	\$6.00.....



Alarm.....	\$44.88.....
Pager.....	\$114.85.....
Sensor Kit.....	\$26.95.....



4 Filter Set.....	\$34.95.....
Superbike Bars, Blk.....	\$18.95.....
Interceptor Filter.....	\$19.95.....
Goldwing Filter.....	\$16.95.....
Venture Filter.....	\$26.95.....

DYNA III

Electronic Ignition.....	\$82.95.....
Dyna S. Ignition.....	\$74.95.....
Dyna Coils.....	\$61.95.....
RPM Limiter.....	\$48.95.....

stebel

Electric Horns.....	\$24.50.....
Air Horns.....	\$29.00.....

INTERPART

Mulholland Airshocks.....	\$158.95.....
Performance Shocks.....	\$94.95.....
STD Brake Pads.....	\$12.95.....
Dual Friction Brake Pads.....	\$15.95.....

ALLYN

Air Seats.....	\$25.95.....
Cycle Foot.....	\$1.95.....

SW

Street Stokers Black.....	\$129.95.....
Air Shocks Chrome.....	\$189.95.....
Air Shocks Black.....	\$169.95.....

KONI

Lifetime Warranty.....	
76 Series w/Spring.....	\$112.00.....
7610 Series w/Spring.....	\$139.00.....

TRACY

2000.....	\$119.95.....
2001.....	\$169.95.....
Stiletto Solar H1000.....	\$89.95.....
Stiletto Bronze H1001.....	\$99.95.....



Tour Jacket.....	\$99.95.....
Sport Jacket.....	\$74.95.....
Bib Pants.....	\$84.95.....
1 pc. Suit.....	\$149.95.....
Winter Gloves Long.....	\$32.95.....

WIDDER

Electric Vest On/Off.....	\$74.95.....
Electric Vest w/Thermo.....	\$92.95.....
Electric Chaps.....	\$65.95.....
Electric Gloves.....	\$67.95.....

TOUR RIDER

Sport Jacket.....	\$82.95.....
Tour Jacket.....	\$97.95.....
Bib Pants.....	\$85.95.....
Early Waring.....	add \$10.00.....

BROOKS

711Z Jacket.....	\$144.95.....
505 Chaps.....	\$99.95.....
T47 Bomber.....	\$144.95.....
973Z Fashion.....	\$134.95.....
984 Riders Only.....	\$149.95.....

HEIN GERICKE

Bomber.....	\$134.00.....
Pilot.....	\$164.00.....
Boot Cut.....	\$126.95.....
Other Styles Available.....	CALL!



Sport.....	\$167.95.....
Superbike.....	\$127.95.....
Handflares.....	\$19.50.....
Nightflight.....	\$78.50.....



Cruise Control.....	\$7.49.....
530 Sprocket Kit w/Chain.....	\$82.00.....
630 Sprocket Kit w/Chain.....	\$94.00.....

DID Chain

630V (O Ring).....	\$62.00.....
530HDL (O Ring).....	\$50.00.....

IF YOU DON'T SEE IT CALL TOLL FREE AND ASK FOR IT!

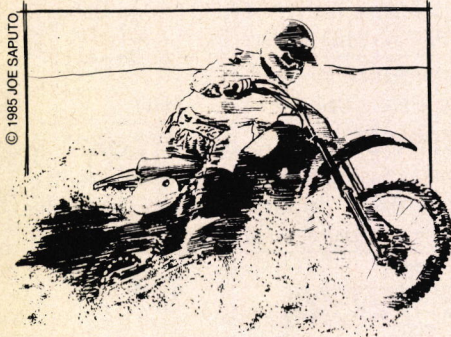
"Our 25th Year in the Motorcycle Business"

BEFORE YOU BUY YOUR NEXT BIKE...GIVE US A CALL.

WE SPECIALIZE IN OUT OF STATE SALES. We are sure you will be pleased to find HOW LARGE your SAVINGS WILL BE. We are FRANCHISED DEALERS FOR •BMW •YAMAHA. We invite you to visit our store when you are in the Dayton, Ohio area. We arrange shipping and registration and you are provided with a full factory warranty. Our motorcycles are fully prepped and assembled by factory trained technicians. CALL 1-513-372-7607 for BIKE PRICES, Ext. 14.

We are not only a VOLUME DEALER in our community

LETTERS



© 1985 JOE SAPUTO

it isn't big enough for coverage by the motorcycle press, then it certainly isn't big enough for Wide World of Sports."

Paul E. Turek
Costa Mesa, California

THROWN STONES

I think most CG readers would agree with Charles Everitt's editorial. One has to look no further than the Sport Lines department in the same issue for a glaring example. What happened at Laguna Seca's Champion Sparkplug 200? All CG tells us is that Roberts won, Merkel won the red-flagged Superbike race and Cooley's mount was disqualified from same. What about the rest of the competition, the F1, F2 and BOTT races? No mention of Spencer's crash, Lawson's no-show, Rainey's win, or a 750 Ducati beating the big guns, Harley and Cagiva. Roberts in a recent interview expressed opinions similar to Everitt's on race coverage. Kenny can go to any newsstand and pick up a copy of Road & Track and with it complete F1 auto racing results: race descriptions, starting grids, finishing orders, times, driver point totals. This kind of coverage does not exist for F1 motorcycle racing on the magazine rack at my local Safeway.

Robert Miller
Seattle, Washington

DUMB LUCK

This concerns the letter in the September issue by the neurosurgeon and motorcyclist Dr. Abramovitz. Think of the lives that could be saved if motorcycle-type helmets were required for use around the home and in the auto. A motorcycle helmet is appropriate in these cases, as the 1-inch-or-so thickness of absorbing material is about right for the minor impacts involved in falls, or in a car where you do not separate from the vehicle (i.e., your directional speed is about the same as the car). The doctor's second qualified statement is if you separate from your bike, the only two things to save you are dumb luck and your hard

hat. A look at the basic statistics from the states (not the massaged analyses from the DOT), shows dumb luck must prevail most of the time.

Since the doctor isn't an engineer, there is no reason for him to know that helmet designers do not employ basic engineering procedures. As an engineer, I took the engineering problem approach. First, take the impact velocity involved, include the rider's weight, and calculate the thickness (not assume it) needed to absorb the impact without severe injury to the brain. Results? Helmet thickness of 6-12 inches for 20-30 mph impacts. The weight and interference with vision and movement make this helmet impractical. But it shows you why wearing a 1-inch-thick helmet does not significantly affect fatality rates. Dumb luck prevails!

Ed Armstrong
Fox River Grove, Illinois

There's something incredibly dumb prevailing here, but it certainly isn't luck—ed.

PREMATURE ARTICULATION

Although I like a well-written, timely article as much as anyone, I still like to have descriptions of events written after the event has taken place, not before, as appears to have happened with the mini-article "Born to Run" in the October 1984 issue.

What caught my attention was the statement that "the estimated average freeway speed was reduced to about 15 mph." As everyone who was actually in L.A. during the Olympics knows, average freeway speeds were higher during the Olympics. This is being called the "Olympic Phenomenon," and there are several studies in progress to pin down the causes.

Since I've caught you with your pants down, please don't give me one of your patented, smart-alecky remarks. Just admit that you were wrong and don't do it again, OK?

Steven Lamb
Canoga Park, California

Actually, they're copyrighted, not patented—ed.

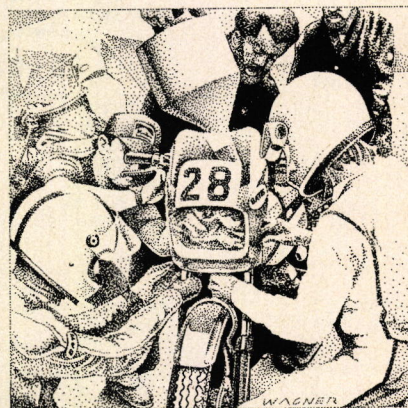
WELL BLOW ME DOWN

Writing with some amusement, and some sympathy, regarding T.J. Rafferty's column, "Pneumatic Battlefields," in your October 1984 issue. Just two weeks ago I sat at the side of the road trying to explain to a uniformed officer that I was safer trying to outrun a rainstorm than to ride in it. As the rain

fell around us, the officer nodded and dutifully wrote the ticket. Here in Colorado, we have winds that blow down off the mountains, similar to those you've described. North of us is Wyoming, home of all winds. I share T.J.'s dread on the cannonade, especially upon entering those man-made funnels our highway engineers design. Rafferty described the ordeal beautifully.

Darek Johnson
Loveland, Colorado

Wyoming, eh? And we thought the ill winds came out of Washington, D.C.—ed.



© 1985 MARK WAGNER

SELECTIVE READING

I've read CYCLE GUIDE every month for the past three years, and I hardly ever see an issue or even an article on Harley-Davidsons. I own a Harley Low Rider, and would like to see more about Harley-Davidson in CYCLE GUIDE.

A lot of guys in this area are sick of seeing Japanese bikes, and would like to see more of the made-in-America Harleys.

Damon Vaniter
Gillespie, Illinois

We tested four Harleys in the past year, not to mention the other articles we've run on H-D—ed.

All letters must include the writer's name and address. Letters will be edited for length. Due to the volume of mail received, we regret we are unable to give personal responses.

Questions or comments? You can talk with the CYCLE GUIDE staff by calling (213) 328-5700. Phones will be answered Monday through Friday, 9 a.m.—5 p.m., Pacific Standard Time.

CYCLE GUIDE

ONE-STOP SHOPPER space is available in 1", 2", 2½", and 3" by one column width only.

RATES PER INSERTION

3-issue rate: 3"—\$320; 2½"—\$275; 2"—\$220; 1"—\$115
6-issue rate: 3"—\$310; 2½"—\$265; 2"—\$210; 1"—\$110
12-issue rate: 3"—\$300; 2½"—\$245; 2"—\$195; 1"—\$105

CONDITIONS: Minimum 3 insertions within contract year. Copy may not change during 3 time insertion period. Agency discount does not apply for

ONE-STOP SHOPPER rates. For more information contact: CYCLEGUIDE, Marcel Fortney, 213 328-5700.

One-Stop Shopper

4-stroke

Performance
Kawasaki • Suzuki • Yamaha
for Honda since 1964
Exhaust systems, bore kits, cams, carburetors. Send \$3.00 with make, model & year for information to:
POWROLL P.O. Box 1206GA5 Bend, OR 97709

THE SOCIETY OF THE SR

YAMAHA Single ENTHUSIASTS

JOIN NOW!

\$10/year, includes newsletter
(US \$15/year foreign)

PO Box 34141
San Diego, CA 92103

Thump!
Thump!



Manufactures and Distributors of Quality Motorcycle Parts.....Specializing in Front Ends for 12 Years.....
FORK TUBES FORK SEALS TWEEN BARS
20,000 pair of Forks in stock. For 90cc to 1300cc.
UNDER — STOCK LENGTH — EXTENDED FORKS.
Fork Seals for Street and Dirt Bikes. Check out our Bushings, Cap Nuts, Cables and More... Order by the Year, Make, Model and Length.
Catalog \$1.00

EXPERT CYCLE
P.O. Box 4152 • Chatsworth, CA 91313 • 213-998-0238

BSA BMW **TRIUMPH** NORTON
USA ONLY

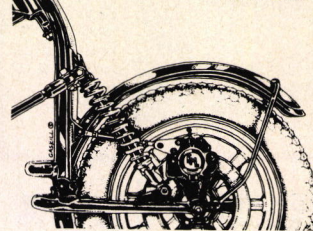
PARTS SHIPPED NATIONWIDE DAILY
NEW — USED — RECONDITIONED
(No catalogs—just tons of parts)

EURO CYCLE IMPORTS INC.
1925 N. MacArthur, Okla. City, Okla. 73127
CALL TOLL FREE (800) 527-5544 • Okla. Res. (405) 787-3440

EML SIDECARS

"The World's Finest Handling Sidecar"
"See road test in this issue"

FOR COLOR CATALOG, CONTACT BOB ODELL
BMW MOTORRAD OF ST. LOUIS, INC.
SIDECAR RESTORATIONS



4011 FOREST
PARK
BOULEVARD
ST. LOUIS,
MISSOURI
63108
PHONE:
(314)
531-4010

GENUINE BMW MOTORCYCLE PARTS

20% OFF CURRENT DEALER LIST

Price List upon request.
Parts shipped anywhere.

CAPITAL CYCLE CORPORATION
PARTS • REPAIRS

CAPITAL CYCLE CORPORATION

1508 Moran Road
(Rt. 634)
Sterling, VA 22170
phone (703) 444-2500

SUZUKI PARTS WAREHOUSE



GIGANTIC INVENTORY

"WE'VE GOT THEM ALL"

TOLL FREE **1-800-323-0078**

In Ill 1-312/894-4661

COD • VISA/MC/AM EX

MIDWEST ACTION CYCLE

617 W. Wise Schaumburg, IL 60193

ORDER DIRECT & SAVE!!

DENVER USED MOTORCYCLE PARTS

UPS DAILY
MAJOR CREDIT CARDS
DEALER INQUIRIES
INVITED

NEW AND USED PARTS OF ALL DESCRIPTIONS
Japanese/British

- ACCESSORIES
- ELECTRICAL
- MECHANICAL
- CARBURETORS
- FRAME AND MACHINE SHOP SERVICE

1618 LAFAYETTE, DENVER CO. 80218 (303) 837-9817

HANDCRAFTED SADDLEBAGS

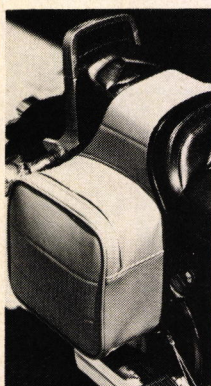
\$59.99

No cyclist should be without these stylish saddlebags. Many custom features:
• Durable leather look vinyl.
• Custom design.
• Universal fit.
• Rust proof nylon zipper.
• Waterproof—weather resistant.
• Easy mounting.
• Each bag measures 12"x12"x5¼" of storage.

To Order: Send check or money order to:

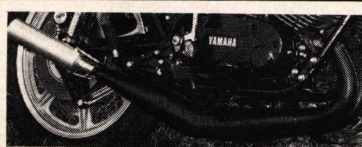
APOLLO ACCESSORIES

3533 Arundell Cir.—E
Ventura, Ca. 93003
or call (805) 963-2830
Immediate Delivery.
add \$3.00 for postage and handling.



Please specify color desired.

- ☐ Black ☐ Brown
- ☐ Burgundy ☐ Silver



RD250, 350, 400, Daytona,
R-5, RZ,
RD350LC **\$140⁰⁰/set**

H-1 &
H-2 pipes **\$210⁰⁰/set**

Complete hardware, aluminum silencers, and instructions.

ATC250R, Trimoto, Odyssey, also Jetski pipes.

Call or Write **FACTORY PIPE PROD.**
816 A Waugh Lane
Ukiah, California 95482
(707) 463-1322

DEALERS INVITED

StreetPaws

A best buy! Fox StreetPaws look great and feel great. Made of soft leather with vented nylon finger side-panels. Double leather at wear points. Suede on finger cleans face shield

Colors: Black/Red;
Black/Blue; Grey/Red;
Grey/Blue or All Black.
Sizes: S,M,L,XL

Only \$19.95

Use Visa, MC or AmExp.

CALL (408) 371-1221.

Send \$1 for 64 page color catalog.

FOX

520 McGilincy
Campbell, CA
95008 U.S.A.

New

- *SUPERBIKE COOLERS
- *COMPETITION COOLERS
- *STREET COOLERS
- *OFF ROAD & ATC COOLERS
- *AUTOMOTIVE COOLERS

CALL OR WRITE FOR FREE 1984 CATALOG

DERALE
OIL COOLERS

17291 Mt. Herrmann, Fountain Valley, CA 92708
(714) 241-9191

One-Stop Shopper

Wingins EXHAUST SYSTEM



KICKER
4 into 1 ... \$99.95
WINNING
4 into 1 ... \$159.95
2 into 1 ... \$99.95

JET DISTRIBUTING
20059 Roscoe Blvd., Winnetka, CA 91306
Phone: (818) 341-8787

Visa, M/C or M/order • CA res. add 6 1/2% tax.

CARL'S HONDA

Genuine Honda Parts & Hondaline Accessories

OVER HALF A CENTURY OF GREAT SERVICE

Dealer's inquiries invited

800-221-7508

NY STATE 800-522-1566
LOCAL 212-257-0230



24-HOUR
COMPUTERIZED
PROCESSING

KAWASAKI & SUZUKI "TRIPLES"



HOME OF WORLD'S FASTEST KAWASAKI "TRIPLES"
WE SPECIALIZE IN "TRIPLES"

Expansion Chambers; Muffled Street, Unmuffled Race or Muffled & Unmuffled Kits. Swing Arms; Road Race, Drag Race, Hill Climb & Street, Swing Arm Bushings, Clutch Springs, Clutch Release Thrust Bearing, Intake Velocity Stacks, Cafe & Drag Bars, etc. Porting and Engine Modification



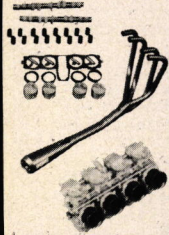
Box 408
Rural Route 2
Princeton, Illinois 61356
Phone (815) 875-3354

KEIHIN CR SPECIAL SMOOTHBORES

(Now available for Ninja, FJ1100)

Very smooth idling, powerful mid-range to high rpm, up to 22% more flow than other smoothbores. Ask your dealer to call us or write for FREE info.

(List make & model) Honda CB1100/CB900/CB750-DOHC, Kawasaki GPZ1100/KZ1000/R/GPZ750/GPZ550/KZ550, Suzuki GS1100/GS1000/GSX750, Yamaha Seca 550.



**Quality Performance
Parts designed by Kaz
"The Wizard" Yoshima.**

Winner! 1982/83
Endurance Racing H/W
Championships.

CB1100F-1125cc Kit
CB900F- 1002cc Kit
CBX- 1130cc Kit

Also in stock: Yoshimura
Aluminum Cannister Exhaust
System (Now for 700&650
Nighthawks)



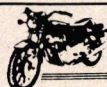
(818) 766-7101 / Outside CA Orders (800) 223-3958
6850 Vineland Ave. #16 M., NO. Hollywood, CA 91605

WE HAVE IT NOW! Britalia Motors

385 Tully Rd. San Jose, CA 95111
"Parts Shipped UPS Daily"
(408) 295-4341
Orders Only/Outside Calif.
(800) 621-5733 MATCHLESS
HUGE CATALOG-\$6.00 POSTPAID MC



ASK YOUR DEALER FOR SUBARU,
THE CHOICE OF CHAMPIONS!



Custom Corners

SPECIALIZING IN Norton COMMANDO SPARES
201 GRASSMERE AVE. EAST PROV., R.I. 02914
BRIAN KANE 401-434-5636
VISA OR MASTERCARD CATALOGUE AVAILABLE DEPT. C.G.
OPEN 7 DAYS A WEEK

CBX SMOOTH-BORES



Rick's Tricks, Inc.

7400 LANTERN ROAD, INDIANAPOLIS, IN. 46256
1-317-845-7393

NOR TRIUMPH BSA

M.A.P. CYCLE ENTERPRISES
MFG/DIST-NEW/USED-STOCK/CUSTOM
Worldwide shipping/send \$3 for catalogue.
(813) 381-1151
7165 30th Ave., N., St. Pete. FL 33710

Mike's Cycle

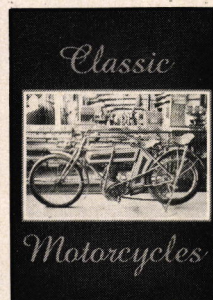
(317) 636-1129

WE SPECIALIZE IN USED
DIRT BIKE PARTS.

ALSO 50cc TO 350cc
STREET BIKE PARTS
MIKE'S CYCLE 954 E
WASHINGTON ST. INDIANAPOLIS
INDIANA 46202

WE SHIP ANYWHERE
MASTERCARD
OR
VISA

THE WORLD'S FIRST Antique Motorcycle Calendar



12 Full Color
Antique Motorcycle
Pictures Framed
in a Beautiful Black
and Gold Frame!
Ideal Christmas gift for
cycle buffs at home or
office. Ideal promotion
item for various types
of businesses.
Suggested Retail
\$4.95

Add \$1.00 for handling & shipping.
Send check or moneyorder to:
B & M MOTORCYCLE PRODUCTS LTD.
60 Arlington Dr., St. Albert, Alberta, Canada T8N 2V5.

STAR

Competition and Recreational Off-Road Motorcycles
740 E. Santa Maria St.
Santa Paula, CA. 93060 U.S.A.
(805) 525-3364 Dealer Inquiries Invited

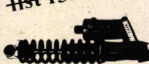
THE FINEST MOTORCYCLE CLOTHING IN THE WORLD



The finest custom
made leathers for the
pleasure or sport rider.
Factory direct only.
Catalog available.
Send \$1.00 for CATALOG
(Refund on first order)

2447 S.E. DIVISION, PORTLAND, ORE. 97202

Marzocchi



RED BODY/BLACK SPRING
GAS OVER OIL TYPE
FIVE POSITION PRELOAD
CHANGEABLE DAMPING
AVAILABLE FOR MOST MODELS

800-441-7029
IN PA. 215-674-1519

MCS Hatboro, Pa. 19040

CUSTOM BUILT
PLEASE GIVE
YEAR, MODEL,
RIDER WEIGHT
24hr SHIPPING

STICKERS



50¢
Each



SCOTT



Four Strokes Truck
Two Strokes SUCK!

when in doubt
GAS IT!

TURN THE
GAS ON
DUMMY



TEAM
HONDA

CRASHING
SUCKS

OAKLEY SHOWA

List the Stickers you want...
Send List and Payment to:



1642 Holmes St.
Livermore, CA 94550
Dept. cg

ROAD RACING AND SUPERBIKE EQUIPMENT

We have it all. Fairings and fiberglass, suspension and handling, horsepower and brakes, exhaust and carburetion, street and racing tires, tools and hard to find performance items at satisfying prices. The most complete selection in America today. For 84 page catalogue and stickers, send \$2.00 (Foreign \$5.00 U.S.)

RACERS SUPPLY

7066 Van Nuys Blvd., Van Nuys, CA 91405



TRIUMPH • BSA

Parts Freight Paid, Orders Over \$100.
Catalogue \$3.00
MOORES CYCLE SUPPLY

49 CUSTER STREET, W. HARTFORD, CT 06110
PHONE (203) 247-1689

Norton

SPOKEN HERE

"BRIAN SLARKS" BRITISH MARKETING

We Ship Daily - ANYWHERE! We specialize in genuine Norton Factory replacement parts, accessories, electronic ignition, etc.

32122 Paseo Adelanto P.O. Box 219
San Juan Capistrano, CA. 92693
(714) 493-5252 Call for a catalog



(714) 631-1770

WEB-CAM

PERFORMANCE CAMSHAFTS

Send \$3 for complete catalog.

1663 Superior Ave. • Costa Mesa, CA 92627

NORRIS CYCLE CAMS

Custom ground camshafts for all applications. Motorcycles and Automotive. Call or write for Catalog and Technical Reference Manual #13. \$4.00 - refundable.

1711 N. El Camino Real, San Clemente, CA 92672
(714) 492-8585

BENT BIKE MOTORCYCLE SALVAGE INC.®

Factory Dist., Dealer Buy-outs.

Chrome Muffler System \$124.95
Black Muffler System \$ 99.95
Leather Jackets U.S. made \$ 99.95
Full-faced Helmets name brand \$ 99.95

Parts from 4,000 wrecks and largest stock new parts

TOLL FREE 1-800-328-8810 Wa. Res. 1-800-247-4711
18327 Hwy. 99 Lynnwood, Wa. 98037

eastern cycle salvage, inc

USED PARTS



All makes and models. Save up to 50%
Many early and late Japanese & obsolete
British parts in stock. 1 DAY SERVICE
VISA, MASTERCARD OR COD
WRITE: Dept. M, 87 PARK ST.
BEVERLY, MASS. 01915 (617) 922-3707

SINCE KAWASAKI PARTS 1966

Phone: (412) 423-4553

ONE OF THE LARGEST PARTS STOCK IN THE U.S.A.

Specializing IN THE HARD TO GET PARTS
Same Day Mail Orders
STATE Model, Year
Frame & Eng. NOS.
CYCLE SPORTS
R.D. 1, Box 151A
Mt. Pleasant, PA 15666

ALLYN'S HONDA-KAWASAKI

Specializing in Original Equipment Parts and Accessories



CALL TOLL FREE
800-423-5662



VISA, Mastercard Accepted

958 N. Maclay Calif. Res. Call
San Fernando, Calif. 91340 818-361-6261



SIDI

NEW CARLA BOOT
MORE PROTECTION
THAN EVER!

BLU/WH, RED/WH,
BLK/YEL
\$169



GOOD STOCK
OF PHANTOMS

800-523-2522

PA CALL 215-672-9100



COSMOPOLITAN MOTORS
HATBORO, PA 19040

Quality Leather CHAPS

\$49⁹⁵ \$89⁹⁵
Suede Top Grain

Includes Postage & Handling

Be protected and comfortable in these stylish chaps. Many custom features.
• Handcrafted from the finest American leathers
• Double Stitching
• Heavy-duty aluminum zippers
• Wind-proof flaps
• Adjustable waist (front & back) for perfect fit
• Easy to zip on and off

Buy directly from our workshop at wholesale.
Call (617) 487-9171 (open 24 hours everyday including Sunday) or send check, money order or card number & exp. date to:

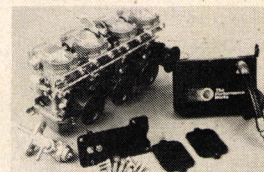
BARNSTABLE RIDING, Box 837, Dept. G,
North Truro, MA 02652. All sizes available.
State pant size (waist and inseam) and color (black, gray or chocolate). We process your order same day.

If you are not completely satisfied, return as shipped for a full refund.

MasterCard VISA AMERICAN EXPRESS UPS COD (617) 487-9171



Ninja Owners



The Performance Works now has available Keihin 33mm "CR" carburetor sets. Although these kits substantially increase peak power, they also offer quicker throttle response and mid-range power increase. In other words, power where you ride.

Each carb set has been correctly jetted for the stock exhaust system and comes complete with all the parts needed for the conversion. Accurate and easy-to-follow instructions are included.

These kits also available for GS1150 and FJ1100.

For more information write or call

The Performance Works

7854 Alabama Ave. Canoga Park, CA 91304 (213) 999-5396

RPM Limiter

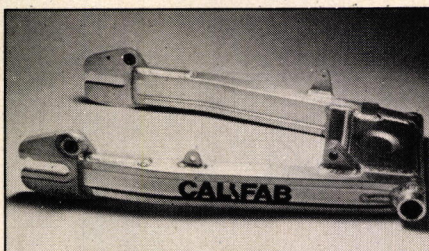


\$59.95

proven DYNA electronics

Street—racing—touring ★ New hi-perf RPM Limiter designed to stop blown engines & bent valves ★ Adjusts from 6,000 to 13,000 rpm's on points or electronic inductive ignitions ★ Kills the spark at coils when set limit is reached, then reactivates when revs drop ★ Individually tested.

KV Products 213/967-3786
1060 E. Cypress, Covina, CA 91724



HONDA OWNERS

If your noticing the usual flex associated with stock production swingarms, CAL FAB has the answer... "The Arm." Constructed of 6061 Aluminum, each swing-arm is heli-arc welded, then heat treated to T-6 to insure maximum strength. Available for all four & six cylinder Hondas \$299.00 complete with shock bushings & needle bearings

CALFAB

4527 E. LA PALMA AVE., ANAHEIM, CA. 92807

Brown's Plating Service

CHROME / GOLD

Steel / Aluminum All Work Guaranteed

Large, modern plant and office, equipped with latest state of the art technology. Skilled, dedicated employees.

Family Owned • Family Operated
"25 Years In Same Location"

Write or Call For Free Information,
Give Make of Cycle:

Brown's Plating Service

Route 5, Box 534, Dept. 308

Paducah, KY 42001-9040

Phone: (502) 554-1146

One-Stop Shopper

AK FORK BRACE

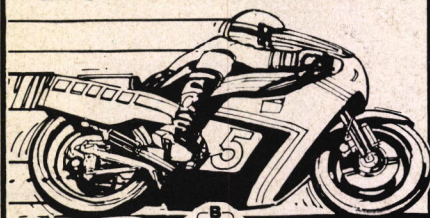


The best fork brace on today's market. Favorably tested in magazines and endorsed by the California Superbike School. Available for Harley Davidson, Honda, Kawasaki, Suzuki and Yamaha from 1976 up. Installs in a few minutes. See your dealer.

\$69.95, Visa/MC or COD.

ATK Leitner Corp.
2650-C Walnut Ave., Tustin, CA 92680
(714) 731-5114 Outs. CA (800) 854-4023

CLUTCHES - CABLES DISC BRAKE PADS



Barnett

P.O. Box 2826 Santa Fe Springs
California 90670

Canadian Carb Kit for Ninja's AMAZING MID-RANGE POWER INCREASE

Call or Write: **Champion** 1980 Harbor Blvd.
Moriwaki USA Costa Mesa, CA 92627
(714) 642-2040

Let this space work for you!

One-Stop Shopper
(213) 328-5700

**CYCLE
GUIDE**

ADVERTISERS

Allyn's Honda/Kawasaki 77
Apollo Accessories 75
ATK Leitner Corp. 78

Barnett Tool & Engineering 78
Barnstable Riding 77
Bell Helmets 8-9
Bent Bike M/C Salvage 77
B & M M/C Prod. Ltd. 76
BMW Motorrad of St. Louis 75
Britalia Motors 76
British Marketing 77
Brown's Plating Service 77

Cal Fab, Inc. 77
Capital Cycle Corp. 75
Carl's Honda 76
Centurion Helmets Cov.2
Champion Moriwaki USA 78
Classic Motorbooks 15
Competition Access. 72-73
Cosmopolitan Motors Inc. 65,77
Custom Corners 76
Cycle Sound 27
Cycle Sports & Service 77

Denver Used M/C Access. 75
Deral Oil Coolers 75

Eastern Cycle Salvage Inc. 77
Euro Cycle Imports 75
Expert Cycle 75

Factory Pipe Products 75

Jet Distributing 76

Kawasaki Motor Corp. 4-5
Dennis Kirk 61
KV Products 77

Langlitz Leathers 76

M.A.P. Cycle Ent. 76
M.C.S. 76
Midwest Action Cycle 75
Mike's Cycle 76
Moore's Cycle Supply 77
Motorace 50
M/C Mechanics Institute 65
Moto-X-Fox 7,75
M-Star Motorcycles 76

Nissan Motor Corp. USA Cov.4
Norris Cycle Products 77
No. Amer. School of M/C Repair 13

Ontario Moto Tech 76

The Performance Works 77
Powroll Perf. Prod. 75

Racecrafters Int'l 48
Racers Supply 77
Rick's Tricks 76
R.J. Reynolds/Camel 28
RK Chain 27

Seattle Film Works 49
Shoei Safety Helmet Co. Cov.3
Simpson Sports 67
The Society of the SR 75
Stick Em Up 76

Tsubaki 76

U.S. Suzuki Motor Corp. 40-41

Web-Cam, Inc. 77
Wirges Creative Perf. Inc. 76

Yoshimura R&D of Amer. 7
Y.P.D.I. 17



MISSED A FEW?

ORDER YOUR
BACK ISSUES OF
CYCLE GUIDE
TODAY!

'83 JAN. APR. JULY OCT.
FEB. MAY AUG. NOV.
MAR. JUNE SEPT. DEC.

'84 JAN. APR. JULY SEPT.
FEB. MAY AUG. OCT.
MAR. JUNE NOV./DEC.

For availability of issues prior to
Jan. '83 contact Cycle Guide,
20916 Higgins Ct., Torrance, CA
90501 (213) 328-5700.

**CYCLE
GUIDE**

CYCLE GUIDE PUBLICATIONS
20916 Higgins Court
Torrance, Ca. 90501

Please send me the following
issues at \$3.00 ea.

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

Qty. _____ Mo./Yr. _____

...beyond form and function.



Experience the eclipse of form and function with the aerodynamics of the Shoei TF-250. It results from untiring endeavors of theory and practice, the analysis of wind tunnel testing and competition, to provide you unsurpassed comfort.

Adjustable air intakes below the face shield direct fresh air through ventilator grooves in the helmet liner, exiting "stuffy" air by way of outlets at the neckline. With fingertip ease the rider can adjust the shield to

any of 6-position openings, for even better air flow. A combined ventilation system that virtually eliminates and prevents shield fogging.

The helmet shell is of precision molded fiberglass, making it super-strong yet super-lightweight. Highlighting the helmet is our contoured polycarbonate shield, positioned to a square view port with a seamless-mold rib, providing you excellent peripheral vision and no distortion.

Comfort beyond experience.
The Shoei TF-250.



COME ALIVE, COME AND DRIVE

NISSAN
MAJOR MOTION



NEW STRONGBOX FOR YOUR BIKES

1985 NISSAN LONG BED 4x4.

Leave it to Nissan to haul your dirt bikes in a cargo box built like a vault.

- Nearly 7½ feet of tough new "strongbox," re-engineered with smooth, seamless construction to fight corrosion.
- Strongbox has durable, double walls of steel; dents to inner walls won't mar outside.
- New tailgate lowers 90°, 180° or comes off for easy loading.
- 1,460-pound payload, standard. Enough for 3 bikes—almost ¾ ton! More than Toyota, Chevy S-10 or Ford Ranger standard models.
- Extra large strongbox and roomy

cab ride on the rugged backbone of a semi: full box girders welded into ladder-type frame.

- Oversize fuel tank for extra range: 19.8 gallons.
- More combined horsepower and torque than any other leading standard, compact truck. Extra power you don't pay extra for. Only Nissan gives you the twin-spark, crossflow, hemihead NAPS-Z engine, standard.
- Wide-clearance independent front suspension steps over rough stuff instead of bouncing like straight axles. (Ask for a demo drive; it's an eye-opener!)
- On-command 4WD.

- A truckload of extras at no extra cost—value Nissan's been building into more trucks for more years than any other compact.

The Nissan Long Bed, 4x4 or 4x2: a new strongbox to safeguard your valuables, and the muscle to move it. And that's what Major Motion is all about.

The best extended-service plan available: up to 5 years/100,000 miles. Ask about Nissan's Security Plus at participating Datsun dealers.



AT YOUR DATSUN DEALER

